STUDI PERENCANAAN *RETAINING WALL* DI PANTAI BOOM KABUPATEN BANYUWANGI

SKRIPSI

TEKNIK PENGAIRAN
KONSENTRASI PERENCANAAN TEKNIK BANGUNAN AIR

Ditujukan untuk memenuhi persyaratan
memperoleh gelar Sarjana Teknik

OLDVIKA NURMA MAS'UDI

NIM. 145060401111014

UNIVERSITAS BRAWIJAYA

FAKULTAS TEKNIK

MALANG

2018

PERNYATAAN ORISINALITAS SKRIPSI

Saya menyatakan dengan sebenar-benarnya bahwa sepanjang pengetahuan saya dan berdasarkan hasil penelusuran berbagai karya ilmiah, gagasan dan masalah ilmiah yang diteliti dan diulas di dalam Naskah Skripsi ini adalah asli dari pemikiran saya. Tidak terdapat karya ilmiah yang pernah diajukan oleh orang lain untuk memperoleh gelar akademik di suatu Perguruan Tinggi, dan tidak terdapat karya atau pendapat yang pernah ditulis atau diterbitkan oleh orang lain, kecuali yang secara tertulis dikutip dalam naskah ini dan disebutkan dalam sumber kutipan dan daftar pustaka.

Apabila ternyata di dalam naskah Skripsi ini dapat dibuktikan terdapat unsur-unsur jiplakan, saya bersedia Skripsi dibatalkan, serta diproses sesuai dengan peraturan perundang-undangan yang berlaku (UU No. 20 Tahun 2003, pasal 25 ayat 2 dan pasal 70).

Malang, 23 Juli 2018

Oldvika Nurma Mas'udi
NIM. 145060401111014

RINGKASAN

Oldvika Nurma Mas'udi, Jurusan Teknik Pengairan, Fakultas Teknik Universitas Brawijaya, Juli 2018, *Studi Perencanaan Retaining Wall di Pantai Boom Kabupaten Banyuwangi,* Dosen Dr. Very Dermawan, ST., MT. dan Dr. Runi Asmaranto, ST., MT.

Pantai Boom merupakan salah satu pantai yang berada di Kabupaten Banyuwangi yang memiliki posisi sangat strategis sehingga berpotensi besar dibidang pariwisata. Oleh karena itu, dibangun pelabuhan marina yang berguna untuk tempat berlabuhnya kapal penyeberangan antar pulau (Bali), kapal pariwisata dan kapal-kapal milik pribadi. Sehubungan dengan kondisi tersebut, diperlukan suatu bangunan pengaman pantai yang mampu menahan gelombang air laut serta melindungi tanah yang ada dibelakangnya. Perencanaan *retainingwall* mula-mula dilakukan dengan membangkitkan data angin menjadi gelombang (H33%). Kemudian gelombang dianalisis dengan kala ulang 25 tahun yang bertujuan untuk memperoleh dimensi *retainingwall*.

Setelah itu menghitung stabilitas bangunan terhadap kelongsoran rotasi dan daya dukung tanah. Pondasi tiang pancang yang direncanakan mengunakan bahan bambu. Dari hasil perencanaan diperoleh gelombang dominan dari arah Timur dengan tinggi gelombang setelah analisa deformasi sebesar 1,4 m. *Retainingwall* terletak pada elevasi +2,01 m dengan tinggi puncak bangunan pada elevasi +6,54 m. Panjang bangunan 1 km dengan berat batu terluar 1,04 ton dan berdiameter 0,97 m. Analisis stabilitas lereng terhadap kelongsoran rotasi mengunakan bantuan *software* Geostudio Geoslope. Pondasi tiang pancang direncanakan sedalam 12 m dengan diameter tiang pancang sebesar 0.2 m. Total rencana angaran biaya (RAB) sebesar Rp 24.734.000.000,00.

Kata Kunci: Retainingwall, analisa deformasi, goestudio geoslope, pondasi tiang

Halaman ini sengaja dikosongkan.

SUMMARY

Oldvika Nurma Mas'udi, *Water Resources Engineering, Faculty of Engineering, University of Brawijaya, July 2018, Study of Retainingwall Planing at Boom Beach Banyuwangi Regency,* Dosen Dr. Very Dermawan, ST., MT. dan Dr. Runi Asmaranto, ST., MT.

Boom Beach is one of the beaches located in Banyuwangi Regency which has a very strategic position so that it has great potential in the field of tourism. Therefore, a marina port is built which is useful for the inter-island ferry boat (Bali), tourist boats and private ships. In connection with these conditions, it is necessary a coastal safety building that can withstand the waves of sea water and protect the existing land behind it. Retaining wall planning was first performed by generating wind data into waves (H33%). Then the waves are analyzed with a 25-year re-period that aims to obtain the retaining wall dimension.

After that calculate the stability of the building against the avalanche rotation and the carrying capacity of the soil. Foundation pile planned to use bamboo materials. From the planning results obtained the dominant wave from the East with the wave height after the deformation analysis of 1.4 m. Retaining wall is located at an elevation of +2.01 m with the height of the building at an elevation of +6.54 m. The length of the building is 1 km with the outer rock weight of 1.04 tons and 0.97 m diameter. Analysis of slope stability against avalanche rotation using Geostudio Geoslope software help. The pile foundation is planned as deep as 12 m with pile diameter of 0.2 m. Total cost plan (RAB) is Rp 24,734,000,000.00.

Keyword: retaining wall, deformation analysis, geostudio geoslope, pile foundation

Halaman ini sengaja dikosongkan.

LEMBAR PENGESAHAN

STUDI PERENCANAAN *RETAINING WALL* DI PANTAI BOOM KABUPATEN BANYUWANGI

SKRIPSI

TEKNIK PENGAIRAN
KONSENTRASI PERENCANAAN TEKNIK BANGUNAN AIR

Ditujukan untuk memenuhi persyaratan
memperoleh gelar Sarjana Teknik

OLDVIKA NURMA MAS'UDI
NIM. 145060401111014

Skripsi ini telah direvisi dan disetujui oleh dosen pembimbing
Pada tanggal 23 Juli 2018

Dosen Pembimbing	Dosen Pembimbing
Dr. Very Dermawan, ST., MT.	Dr. Runi Asmaranto, ST., MT.
NIP. 19730217 199903 1 001	NIP. 19710830 200012 1 001

Mengetahui,
Ketua Jurusan Teknik Pengairan

Dr. Ir. Ussy Andawayanti, MS.
NIP. 19610131 198609 2 001

Kamu sudah berusaha dan melakukan yang terbaik

Biarkan waktu dan kehidupan terus berjalan

Untuk yang terkasih:

Ayah dan Ibu

KATA PENGANTAR

Segala puji dan syukur kehadirat Allah Tuhan Maha Besar lagi Maha Kaya IlmuNya, yang telah memberikan limpahan barokah ilmu dan rahmatNya kepada penulis sehingga dapat menyelesaikan Laporan skripsi yang berjudul **"Studi Perencanaan *Retaining Wall* di Pantai Boom, Kabupaten Banyuwangi"** dengan baik dan lancar.

Laporan skripsi ini disusun untuk memenuhi persyaratan memperoleh gelar sarjana Jurusan Teknik Pengairan Fakultas Teknik Universitas Brawijaya. Oleh karena itu, penyusun mengucapkan terima kasih kepada:

1. Bapak Dr. Very Dermawan, ST., MT., sebagai dosen pembimbing yang telah banyak memberikan masukan-masukan dan membimbing penulis dalam menyelesaikan laporan skripsi.
2. Bapak Dr. Runi Asmaranto, ST., MT., sebagai dosen pembimbing yang telah banyak memberikan masukan-masukan dan membimbing penulis dalam menyelesaikan laporan skripsi.
3. Ibu Dr. Eng. Evi Nur Cahya, ST., MT., dan Bapak Ir. Heri Suprijanto, MS sebagai dosen penguji yang telah memberikan masukan-masukan serta saran.
4. Kedua orang tua saya tercinta, Ayahanda Imam Mas'udi dan Ibunda Ruruh Rianti serta seluruh keluarga saya atas segala do'a dan pengorbananya yang telah memberikan dorongan, semangat dan cintanya dalam penyusunan laporan ini.
5. General Manager PT. Pelabuhan Indonesia III (Persero) Cabang Tanjung Wangi dan seluruh staff PT. Pelabuhan Indonesia III (Persero) Cabang Tanjung Wangi yang tidak mungkin disebutkan satu persatu
6. Saudara kandung saya, Zaedan Maulana dan Farid Yardani yang selalu memberi dukungan.
7. Mas Aji Prakoso dan Abdan Izzan yang sudah banyak membantu saya dalam pengerjaan laporan ini
8. Nabila Zahra, Firda Novita dan Qistan Bagas sebagai adik yang selalu memberi dukungan.
9. Valina Ayu Dewanti, Tami Pratiwi, Nurfadhlillah A., Tresna Asih Utami, Ni Komang Yuli Sariyanti, Annisa Rahma T., Ledib Aprilansi, Yoan Nathalia S., Indah Nur Alifa Tandju, atas segala bantuan dan dukungan.

10. Teman-teman 2013, Mbak Vicky, Mbak Izza, Mbak Disa, Mbak Tri, Mbak Bivi, Abang Rhanda, Mas Bagas, Mas Adit, Mas Putu, Mas Fari, Mas Aji, Mas Ilham yang tidak bosan memberi masukan dan semangat.
11. Dwi Aprilia, Dea Amanda, Diah Putri, Hema Maretha konco Laros.
12. Irfan, Demas, Hans, Hanun, Ruli, Sonia, Desy, Tina, Intan, Tifa, Ica dan teman-teman Sekar Melati yang tidak bisa disebutkan satu-satu.
13. Semua teman-teman KBMP khususnya angkatan 2014 yang banyak membantu menyelesaikan laporan skripsi ini.

Akhir kata penulis berharap bahwa laporan skripsi ini dapat bermanfaat bagi instansi terkait dan semua pembaca.

Malang, Juli 2018
Penyusun

Oldvika Nurma Mas'udi
NIM. 145060401111014

DAFTAR ISI

Halaman

DAFTAR TABEL

DAFTAR GAMBAR

DAFTAR LAMPIRAN

BAB I
PENDAHULUAN

1.1. Latar Belakang

Indonesia sebagai negara kepulauan mempunyai lebih dari 17.000 pulau dan wilayah pantai sepanjang 80.000 km. Menurut koreksi PBB tahun 2008, Indonesia tercatat sebagai negara berpantai terpanjang keempat di dunia setelah Amerika Serikat (AS), Kanada dan Rusia. Pantai adalah jalur yang merupakan batas antara darat dan laut, kearah laut dipengaruhi oleh fisik laut dan sosial ekonomi bahari, sedangkan kearah darat dibatasi oleh proses alami dan kegiatan manusia di lingkungan darat.

Pantai sebagai batas antara darat dan laut, menjadikannya tidak lepas dengan masalah abrasi yang diakibatkan oleh gelombang laut. Gelombang laut adalah pergerakan naik dan turunnya air dengan arah tegak lurus permukaan air laut yang membentuk kurva sinusoidal. Gelombang laut disebabkan oleh angin, gaya tarik menarik bumi – bulan – matahari, gempa di dasar laut, maupun pergerakan kapal. Angin di atas lautan memindahkan tenaganya ke permukaan perairan, menyebabkan riak-riak, alunan/bukit, dan berubah menjadi apa yang kita sebut sebagai gelombang atau ombak.

Wilayah pantai ini merupakan daerah yang sangat sering dimanfaatkan sesuai dengan kebutuhan pembangunan dan kemudian mempunyai fungsi antara lain sebagai objek wisata, industri, pelabuhan, pertambakan, perikanan tangkap, dan sebagainya. Dengan adanya pembangunan tersebut, dapat berpengaruh terhadap perubahan ekosistem dan sumber daya alam yang terdapat disekitar daerah pantai. Selain itu juga dapat dapat menimbulkan dampak negatif di daerah pantai dengan terjadinya erosi dan sedimentasi pantai. Erosi pantai dapat menyebabkan mundurnya garis pantai dan rusaknya berbagai fasilitas yang ada di daerah tersebut, seperti kawasan pemukiman dan prasarana umum, jalan, tempat ibadah, perkantoran, sekolah, dan sebagainya (Triatmodjo, 1999:1).

Kabupaten Banyuwangi merupakan salah satu daerah kabupaten yang berada di ujung timur Provinsi Jawa Timur. Kabupaten Banyuwangi terletak pada posisi 113°53'-114°38' Bujur Timur dan diantara 7°43'-8°46' Lintang Selatan. Dengan panjang garis pantai sekitar 175,8 km. Luas Kabupaten Banyuwangi adalah 5.782,50 km². Wilayah Kabupaten Banyuwangi terbagi menjadi 24 Kecamatan, 28 Kelurahan, 189 Desa, 2.827 Rukun Warga (RW), dan 10.532 Rukun Tetangga (RT). Kabupaten Banyuwangi berbatasan dengan

Kabupaten Situbondo di sebelah utara, Selat Bali di sebelah timur, Kabupaten Jember dan Bodowoso di sebelah barat dan Samudra Indonesia di sebelah selatan.

Keberadaan Kabupaten Banyuwangi secara geografis memiliki posisi yang sangat strategis dengan berbagai sumber daya alam yang potensial dan berpotensi besar dibidang pariwisata. Oleh karena itu, ada sebagian pantai yang rencananya akan dibangun pelabuhan marina yang berguna untuk tempat berlabuhnya kapal penyeberangan antar pulau (Bali), kapal pariwisata dan kapal kapal milik pribadi. Sehubungan dengan kondisi tersebut, diperlukan suatu bangunan pengaman pantai yang mampu menahan gelombang air laut serta melindungi tanah yang ada dibelakangnya sesuai dengan kondisi daerah setempat.

1.2.Identifikasi Masalah

Pantai Boom yang berlokasi di Kabupaten Banyuwangi, Kelurahan Kampung Mandar, merupakan daerah pantai yang dimanfaatkan sebagai areal wisata, perkampungan, serta sebagai tempat mata pencaharian bagi warga sekitar. Pantai Boom berhadapan langsung dengan Selat Bali yang mempunyai potensi gelombang laut besar yang dapat mengakibatkan terjadinya abrasi di sepanjang pantai.

Pantai Boom memiliki panjang kurang lebih 4 Km dan daerah pantai dekat dengan rumah penduduk di daerah Kampung Mandar Kecamatan Banyuwangi. Pantai Boom dulunya merupakan pelabuhan. Saat ini aktifitas pelabuhan masih ada namun tidak terlalu ramai. Pantai ini menjadi salah satu pantai wisata di Kabupaten Banyuwangi. Di pantai ini akan dibangun Pelabuhan Marina yang berguna untuk tempat berlabuhnya kapal penyeberangan antar pulau (Bali), kapal pariwisata serta kapal milik pribadi. Selain itu di lokasi tersebut juga akan dibangun beberapa fasilitas lainnya seperti hotel dan cafe-cafe. Sehingga dapat menjadi pemasukan untuk daerah. Disamping itu, dengan adanya bangunan yang dipergunakan untuk berlabuhnya kapal pariwisata ini bisa membuat wisata daerah Pantai Boom lebih terekspos tidak hanya di daerah Jawa Timur tetapi juga di luar Pulau Jawa.

Sehubungan dengan kondisi tersebut, pembangunan bangunan pengaman pantai sangat diperlukan guna menahan gelombang air laut serta melindungi tanah yang ada di belakangnya.

1.3.Rumusan Masalah

Dari batasan masalah yang diberikan pada studi, dapat disimpulkan pokok masalah penting yang dirumuskan sebagai berikut:

1. Berapa tinggi gelombang yang digunakan dalam perencanaan bangunan dinding penahan (*retaining wall*)?
2. Bagaimana desain dan dimensi bangunan dinding penahan (*retaining wall*) untuk menahan gelombang serta melindungi tanah di belakangnya?
3. Bagaimana stabilitas bangunan dinding penahan (*retaining wall*) yang direncanakan?
4. Berapa besaran Rancangan Anggaran Biaya (RAB) yang dibutuhkan untuk pembangunan dinding penahan (*retaining wall*)?

1.4.Batasan Masalah

Pembahasan masalah studi diperlukan agar pembahasan yang dilakukan lebih terarah dan sesuai dengan tujuan studi. Batasan masalah dalam studi ini adalah sebagai berikut:

1. Daerah studi terletak di Pantai Boom, Kelurahan Kampung Mandar, Kecamatan Banyuwangi, Kabupaten Banyuwangi, Jawa Timur.
2. Daerah studi hanya merencanakan lokasi A (lokasi kolam).
3. Studi ini meliputi perencanaan bangunan dinding penahan (*retaining wall*).
4. Struktur yang digunakan ditinjau berdasarkan dimensi bangunan.
5. Menghitung Rancangan Anggaran Biaya (RAB).
6. Analisis pembangkit gelombang menggunakan data arah dan kecepatan angin maksimum selama 10 tahun.
7. Tidak membahas metode pelaksanaan pekerjaan.
8. Tidak menganalisa sedimentasi pasca konstruksi.
9. Tidak membahas aspek AMDAL dan aspek ekonomi.
10. Tidak membahas perhitungan stabilitas konstruksi akibat penurunan tanah (*settlement*).

1.5. Tujuan dan Manfaat

Dari rumusan masalah yang ada, dapat diketahui tujuan dari studi ini adalah:

1. Mengetahui tinggi gelombang yang digunakan dalam perencanaan bangunan dinding penahan (*retaining wall*).
2. Mengetahui desain dan dimensi dari dinding penahan (*retaining wall*) untuk menahan gelombang laut dan melindungi tanah dibelakangnya.
3. Mengetahui stabilitas bangunan dinding penahan (*retaining wall*) yang direncanakan.

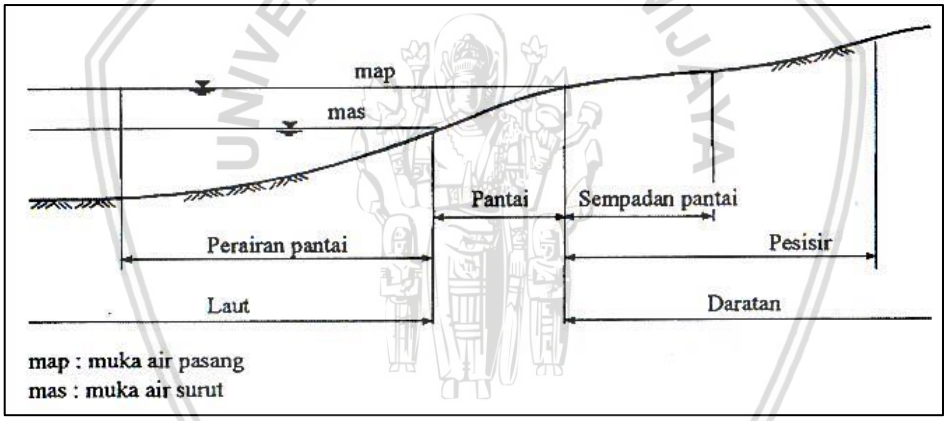
4. Mengetahui besaran Rancangan Anggaran Biaya (RAB) yang dibutuhkan untuk pembangunan dinding penahan (*retaining wall*).

Manfaat dari studi ini diharapkan dapat digunakan sebagai sumbangan pemikiran bagi instansi yang berwenang dalam perencanaan pengembangan daerah pantai. Selain itu hasil studi ini diharapkan dapat bermanfaat untuk menambah wawasan akedemik di bidang Teknik Pantai.

BAB II
KAJIAN TEORI

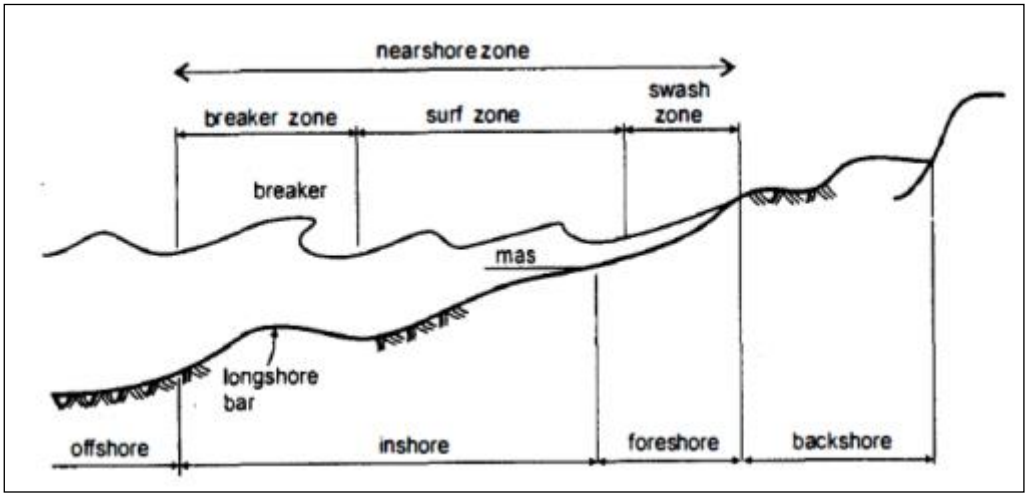
2.1. Definisi Pantai

Ada dua istilah tentang kepantaian dalam bahasa indonesia yang sering rancu pemakaiannya, yaitu pesisir (*coast*) dan pantai (*shore*). Pesisir adalah daerah darat di tepi laut yang masih mendapat pengaruh laut seperti pasang surut, angin laut, dan perembesan air laut. Sedang pantai adalah daerah di tepi perairan yang dipengaruhi oleh air pasang tertinggi dan air surut terendah. Daerah lautan adalah daerah yang terletak di atas dan di bawah permukaan laut di mulai dari sisi laut pada garis surut terendah, termasuk dasar laut dan bagian bumi di bawahnya. Garis pantai adalah garis batas pertemuan antara daratan dan air laut, di mana posisinya tidak tetap dan dapat berpindah sesuai dengan pasang surut air laut dan erosi pantai yang terjadi (Triatmodjo, 1999, p.1).



Gambar 2.1 Definisi dan batasan pantai
Sumber: Triatmodjo (1999,p.2)

Ditinjau dari profil pantai, daerah pantai dibagi menjadi empat bagian yaitu *offshore*, *inshore*, *foreshore*, dan *backshore*. *Offshore* adalah daerah dari garis gelombang pecah ke arah laut. *Foreshore* adalah daerah yang terbentang dari garis pantai pada saat muka air rendah sampai batas atas dari *uprush* pada saat air pasang tinggi. *Backshore* adalah daerah yang dibatasi oleh *foreshore* dan garis pantai yang terbentuk pada saat terjadi gelombang badai bersamaan dengan muka air tinggi.



Gambar 2.2 Definisi dan karakteristik gelombang di daerah pantai
Sumber: Triatmodjo (1999,p.3)

Sedang daerah yang terbentang ke arah pantai dari garis gelombang pecah dibedakan menjadi tiga daerah yaitu *breaker zone*, *surf zone*, dan *swash zone*. Daerah gelombang pecah (*breaker zone*) adalah daerah dimana gelombang yang datang dari laut (lepas pantai) mencapai ketidakstabilan dan pecah. *Surf zone* adalah daerah yang terbentang antara bagian dalam dari gelombanng pecah dan batas naik turunnya gelombang di pantai. *Swash zone* adalah daerah yang dibatasi oleh garis batas tertinggi naiknya gelombang dan batas terendah turunnya gelombang dan batas terendah turunnya gelombang di pantai.

2.2. Gelombang

Gelombang adalah gerak muka air *sinusoidal* secara periodik sehingga membentuk puncak dan lembah. Gelombang di laut dapat dibedakan menjadi beberapa macam yang tergantung pada gaya pembangkitannya. Gelombang tersebut adalah gelombang angin yang dibangkitkan oleh tiupan angin dipermukaan air laut, gelombang pasang surut dibangkitkan oleh gaya tarik benda-benda langit terutama matahari dan bulan terhadap bumi, serta gaya yang ditimbulkan oleh kapal.

Berdasar pada kondisi di atas fenomena gelombang laut dijelaskan dengan pendekatan *reguler waves* dan *irregular waves*. Pada *regular waves* pendekatan dilakukan dengan memahami mekanika gelombang yang memiliki periode dan tinggi gelombang konstan. Pada *irregular waves* digunakan metode statistik untuk menganalisis gelombang dimana deret gelombang tinggi dan periode berbeda (Department of army, 2008, p.II-1-1).

Diantara beberapa bentuk gelombang tersebut yang paling penting dalam bidang teknik pantai adalah gelombang angin (untuk selanjutnya disebut gelombang) dan pasang surut. Gelombang dapat menimbulkan energi untuk membentuk pantai, menimbulkan arus dan

transpor sedimen dalam arah tegak lurus dan sepanjang pantai, serta menyebabkan gaya-gaya yang bekerja pada bangunan pantai (Triatmodjo, 1999, p.11).

Berdasarkan kedalaman relatif, yaitu perbandingan antara kedalaman air (d) dan panjang gelombang (L), gelombang dapat diklasifikasikan menjadi tiga macam yaitu (Triatmodjo, 2012, p.25):

1. Gelombang di laut dangkal, jika $d/L \leq 1/20$
2. Gelombang di laut transisi, jika $1/20 < d/L < 1/2$
3. Gelombang di laut dalam, jika $d/L \geq ½$

2.2.1 Pembangkitan Gelombang

Gelombang merupakan salah satu faktor utama yang menentukan dalam perencanaaan bangunan-bangunan laut seperti dermaga dan pemecah gelombang di pelabuhan, bangunan pelindung pantai, dan anjungan lepas pantai. Gelombang di perairan dapat dibangkitkan oleh berbagai gaya antara lain angin, gempa, kapal yang bergerak, dan gaya tarik-menarik benda-benda langit.

Angin yang berhembus di atas permukaan air akan memindahkan energinya ke air. Kecepatan angin akan menimbulkan tegangan pada permukaan laut, sehingga permukaan air yang semula tenang akan terganggu dan timbul riak gelombang kecil di atas permukaan air. Apabila kecepatan angin bertambah, riak tersebut menjadi semakin besar, dan apabila angin berhembus terus akhirnya akan terbentuk gelombang. Semakin lama dan semakin kuat angin berhembus, semakin besar gelombang yang terbentuk. Tinggi dan periode gelombang yang dibangkitkan dipengaruhi oleh angin yang meliputi kecepatan angin *U*, lama hembus angin D, arah angin, dan *fetch* (Triatmodjo, 1999, p.149).

2.2.1.1 Angin

Angin yang berhembus mengakibatkan permukaan air laut yang mulanya tenang menjadi timbul riak air atau gelombang kecil. Dengan bertambahnya kecepatan dan durasi hembusan maka riak tersebut akan menjadi semakin besar, kemudian membentuk gelombang.

a. Data Angin

Data angin yang digunakan untuk peramalan gelombang adalah data angin dipermukaan laut pada lokasi pembangkitan. Data tersebut diperoleh dari pengukuran langsung di atas permukaan laut atau pengukuran di darat kemudian dikonversi menjadi data angin di laut. Kecepatan angin diukur dengan Anemometer, dan biasanya dinyatakan dengan knot. Satu knot adalah panjang satu menit garis bujur melalui khatulistiwa yang ditempuh dalam satu jam, atau 1 knot = 1,852 km/jam = 0,5 m/d. Dengan pencatatan jam-

jaman tersebut akan diketahui angin dengan kecepatan tertentu dan durasinya, kecepatan angin maksimum, arah angin, dan dapat pula dihitung kecepatan angin rerata harian.

b. Kecepatan Angin

Kecepatan angin biasanya dicatat dalam harga-harga ekstrim saja. Kecepatan angin ekstrim hanya terjadi dalam periode waktu yang pendek yang biasanya kurang dari dua menit. Oleh karena itu, pengukuran kecepatan angin ekstrim hanya terjadi pada waktu singkat tersebut tidak digunakan sebagai kecepatan angin di dalam pembangkitan gelombang. Hal ini mengakibatkan data kecepatan angin tersebut harus melewati tahap koreksi.

Pengukuran gelombang dengan cara menganalisa data angin menggunakan data angin yang ada di laut, tetapi biasanya data angin yang ada adalah data angin hasil pengukuran di darat. Oleh karena itu perlu diadakan koreksi-koreksi antara data angin yang ada di darat dengan data angin yang ada laut.

1. Koreksi terhadap lokasi dan stabilitas

   Rumus yang dipakai untuk menghitung koreksi pengukuran kecepatan angin akibat perbedaan ketinggian tempat pengukuran adalah :

   $$U = R_T.R_L.(U_{10}) \qquad (2\text{-}1)$$

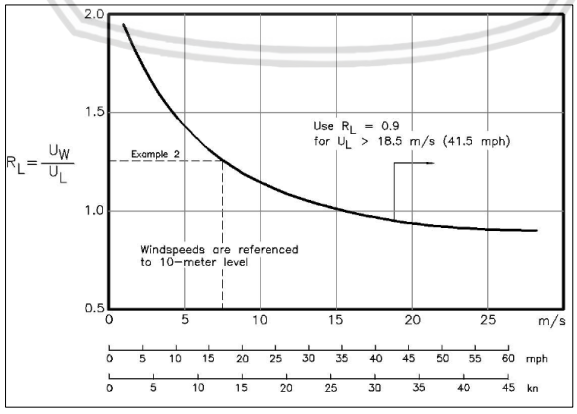
   Dengan :

   R_L = faktor koreksi akibat perbedaan ketinggian

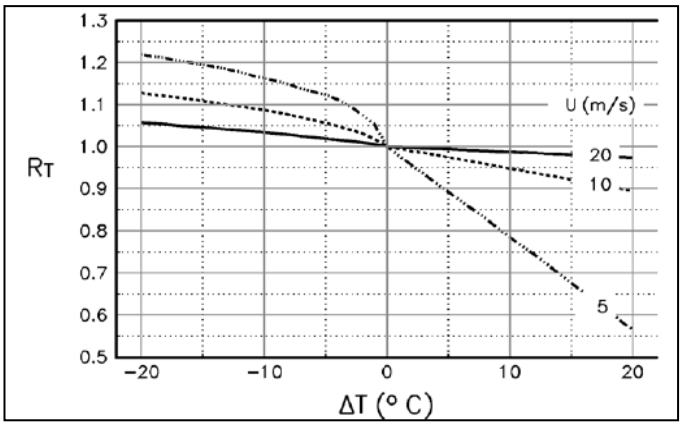
   R_T = faktor korelasi akibat perbedaan temperatur udara air

   U_{10} = kecepatan angin pada elevasi 10 m (m/detik)

   Nilai koreksi ini juga bisa diketahui dengan melihat Grafik R_L seperti pada gambar berikut ini :



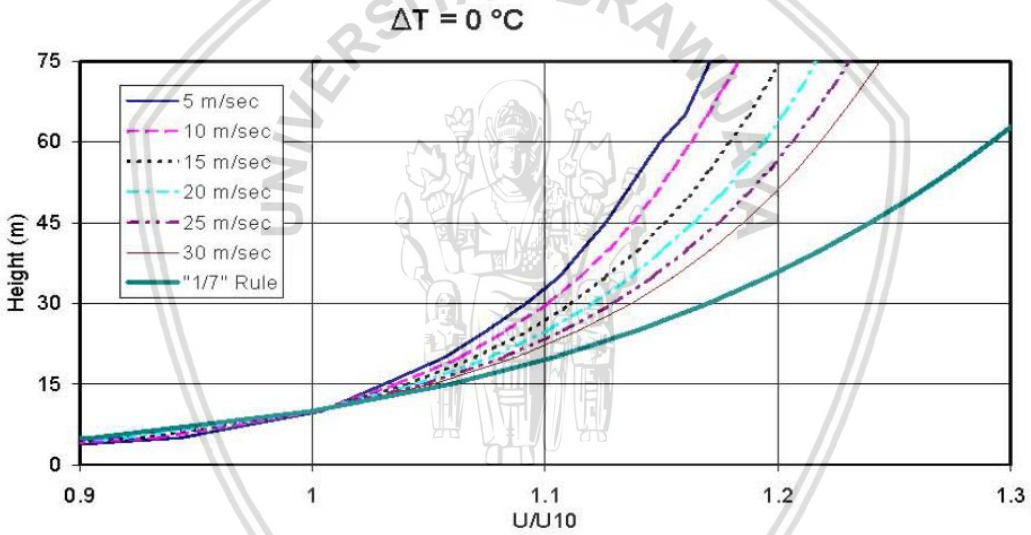
Gambar 2.3 Grafik korelasi akibat perbedaan ketinggian, RL
Sumber: Depatrment of the army (2008,p.II-2-14)



Gambar 2.4 Grafik korelasi akibat perbedaan suhu udara dan laut, RT
Sumber: Depatrment of the army (2008,p.II-2-15)

2. Koreksi terhadap elevasi

Jika kecepatan angin observasi berada pada elevasi lebih dari 10 m di atas permukaan laut, maka perlu disesuaikan dengan mengunakan Gambar 2.5



Gambar 2.5 Kurva penentuan tinggi terhadap U/U_{10} pada $\Delta T = 0°$ C
Sumber: Depatrment of the army (2008,p.II-2-5)

Untuk pengunaan 1/7 *rule* digunakan data angin diambil pada kondisi mendekati netral yaitu pada ketingian 10 di atas permukaan laut dengan batasan elevasi 8-12 m (Depatrment of the army, 2008, p.II-2-11) sebagai berikut :

$$U_{10} = U_z \left(\frac{10}{z}\right)^{1/7} \qquad (2\text{-}2)$$

Metode umum yang digunakan untuk menentukan U_{10} adalah :

$$U_{10} = \frac{U_z}{U/U_{10}} \qquad (2\text{-}3)$$

Dengan :

U_{10} = kecepatan angin pada elevasi +10 m (m/detik)

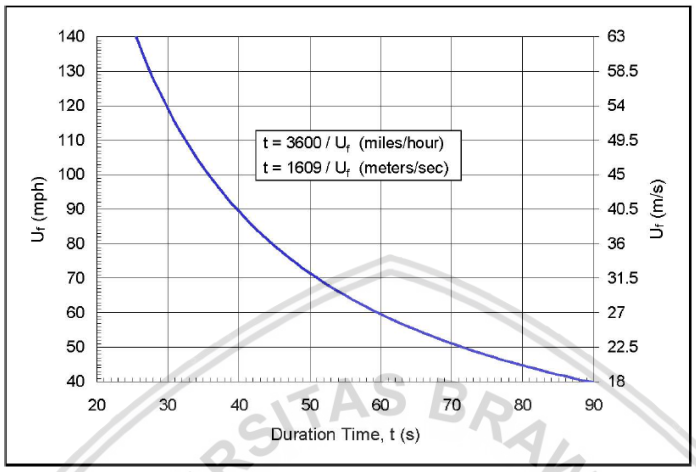
U_z = kecepatan angin pada elevasi +z m (m/detik)

U/U_{10} = koefisien koreksi pada elevasi +10 m (gambar 2.5)

z = elevasi pengukuran kecepatan angin (m)

3. Koreksi terhadap durasi

Gambar 2.6 dapat digunakan apabila angin observasi dipertimbangkan, dan maka dari itu dari kecepatan angin sebaiknya disesuaikan durasinya.



Gambar 2.6 Durasi dari kecepatan angin tercepat (fastest-test) U_t sebagai fungsi dari kecepatan angin

Sumber: Depatrment of the army (2008,p.II-2-5)

Untuk menghitung faktor koreksi durasi dipakai persamaan sebagai berikut :

$$t = \frac{1609}{U} \qquad (2\text{-}4)$$

Sedangkan untuk mencari nilai $\frac{U_t}{U_{3600}}$ digunakan rumus berikut :

$$\frac{U_t}{U_{3600}} = 1.277 + \tanh\left(0.9 \log_{10} \frac{45}{t}\right) \text{ untuk } 1<t<3600 \text{ detik} \qquad (2\text{-}5)$$

$$\frac{U_t}{U_{3600}} = -0.15 \log_{10} t + 1.5334 \text{ untuk } 3600<t<36000 \text{ detik} \qquad (2\text{-}6)$$

Mencari kecepatan angin rata-rata dalam 1 jam

$$U_{t=3600} = \frac{U_t}{U_t / U_{3600}} \qquad (2\text{-}7)$$

4. Koreksi terhadap tegangan angin

Pengukuran data angin dipermukaan laut adalah paling sesuai untuk peramalan gelombang. Hasil dari perhitungan kecepatan angin tersebut diatas kemudian dikonversikan menjadi faktor tegangan angin (U_A) dengan menggunakan rumus :

$$U_A = 0{,}71\, U^{1{,}23} \qquad (2\text{-}8)$$

Dimana *U* adalah keceptan angin dalam *m/s*.

2.2.1.2 *Fetch*

Fetch dapat didefinisikan sebagai panjang daerah pembangkitan gelombang pada arah datangnya angin. Di dalam peramalan gelombang angin, *fetch* biasanya dibatasi oleh bentuk daratan yang mengelilingi daerah pebangkitan gelombang. Di daerah pembentukan gelombang, gelombang tidak hanya dibangkitkan dalam arah yang sama dengan arah angin tetapi juga dalam berbagai sudut terhadap arah datangnya angin. Gambar 2.7 menunjukkan cara untuk mendapatkan *fetch* efektif.

Fetch rerata efektif ditunjukkan oleh persamaan berikut :

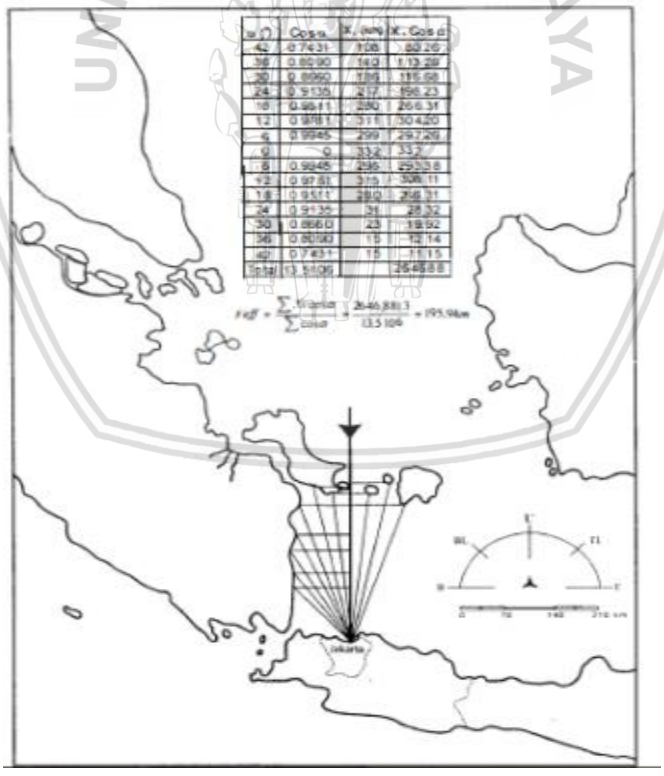
$$F_{eff} = \frac{\sum X_i Cos\alpha_1}{\sum Cos\alpha_1} \qquad (2\text{-}9)$$

Dengan :

F_{eff} = *fetch* rerata efektif

x_i = panjang segmen *fetch* yang diukur dari titik observasi gelombang ke ujung akhir *fetch*

α_i = deviasi pada kedua sisi arah angin, dengan menggunakan pertambahan 6^o sampai sudut sebesar 42^o pada kedua sisi dari arah angin



Gambar 2.7 *Fetch*
Sumber: Triatmodjo (1999, p.156)

2.2.1.3 *Fully Developed Sea*

Pada kondisi laut terbuka, energi yang dihasilkan oleh angin sudah terserap penuh pada permukaan air yang membentuk gelombang. Pada kecepatan angin yang tertentu dimana gelombang tidak mungkin lagi untuk tumbuh, lama hembusan angin telah melebihi dari waktu yang diperlukan untuk mebangkitkan gelombang.

Pada kondisi di atas, gelombang yang terjadi adalah gelombang yang terbentuk sempurna (*Fully Developed Sea*) ini artinya pada kecepatan angin tertentu gelombang yang terjadi merupakan gelombang maksimum tanpa mendapat batasan lama hembusan angin dan panjang *fetch*.

2.2.2 Statistik dan Peralaman Gelombang

Menurut Triatmodjo dalam buku Teknik Pantai (1999), gelombang memiliki bentuk yang tidak teratur, dengan tinggi dan periode yang tidak konstan. Pengukuran gelombang di suatu tempat memberikan pencatatan muka air sebagai fungsi waktu. Pengukuran ini dilakukan dalam waktu cukup panjang, sehingga data gelombang akan sangat banyak. Mengingat kekompleksan dan besarnya data tersebut maka gelombang akan dianalisa secara statistik untuk mendapatkan bentuk gelombang yang bermanfaat. Parameter gelombang yang digunakan adalah tinggi gelombang.

2.2.2.1 Gelombang Repersentatif

Untuk keperluan perencanaan bangunan-bangunan pantai, perlu dipilih tinggi dan periode gelombang individu yang dapat mewakili satu spektrum gelombang. Gelombang tersebut disebut gelombang representatif. Apabila tinggi gelombang dari suatu pencatatan diurutkan dari yang terbesar sampai yang terendah atau sebaliknya, maka dapat ditentukan nilai H_n yang merupakan rerata dari n persen gelombang tertinggi. Dengan bentuk tersebut, maka akan diperoleh karakteristik gelombang alam dalam bentuk gelombang tunggal. Misalnya H_{10} adalah tinggi rerata dari 10 % gelombang tertinggi dari suatu pencatatan gelombang. Bentuk yang paling banyak digunakan adalah H_{33} atau rerata dari 33 % gelombang tertinggi dari sebuah pencatatan gelombang; disebut juga H_S (tinggi gelombang signifikan).

Pembentukan gelombang di perairan dalam (*deep water waves*) dianalisis dengan formula spektrum JOANSWAP berikut ini. Prosedur peramalan ini berlaku untuk kondisi gelombang tidak terbentuk penuh (*non fully developed sea*), baik untuk kondisi *fetch* terbatas (*fetch limited condition*), maupun kondisi durasi terbatas (*duration limited condition*) sebagai berikut:

$$\frac{gt_c}{U_A} = 68{,}8 \left(\frac{gF}{{U_A}^2}\right)^{2/3} \qquad (2\text{-}10)$$

$$\frac{gH_s}{U_A{}^2} = 0{,}0016 \left(\frac{gF}{U_A{}^2}\right)^{1/2} \quad (2\text{-}11)$$

$$\frac{gT_p}{U_A} = 0{,}2857 \left(\frac{gF}{U_A{}^2}\right)^{1/3} \quad (2\text{-}12)$$

Sedangkan persamaan untuk keadaan gelombang terbentuk penuh adalah:

$$\frac{gt_c}{U_A} = 7{,}15 \times 10^4 \quad (2\text{-}13)$$

$$\frac{gH_s}{U_A{}^2} = 0{,}2433 \quad (2\text{-}14)$$

$$\frac{gT_p}{U_A} = 8{,}134 \quad (2\text{-}15)$$

Dengan:

T_c = durasi angin (detik)

H_s = tinggi gelombang signifikan berdasarkan energi (m)

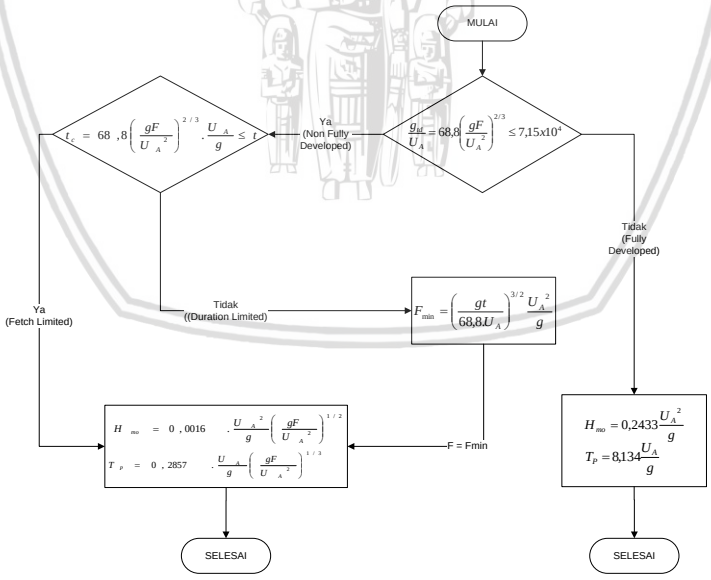
T_p = periode puncak gelombang (detik)

T_s = $0{,}95T_p$ = peroide puncak gelombang signifikan (detik)

U_A = $0{,}71U_{10}{}^{1{,}23}$ = faktor tekanan angin (m/detik)

F = panjang *fetch* (m)

Metode peramalan gelombang signifikan dapat di sajikan dalam bentuk diagram alir seperti berikut ini:



Gambar 2.8 Diagram alir proses peramalan gelombang berdasarkan data angin.
Sumber: Depatrment of the army (2010,p.5-10)

2.2.2.2 Penentuan Tinggi Gelombang dan Kala Ulang Rencana

Untuk keperluan perencanaan bangunan pantai maka harus dipilih tinggi gelombang yang cukup memadai untuk tujuan yang telah ditetapkan. Di bawah ini diberikan beberapa pedoman pemilihan tinggi gelombang rencana yang harus dipertimbangkan dalam perencanaan.

Tabel 2.1
Pedoman pemilihan jenis dan kala ulang gelombang

No.	Jenis Bangunan	Gelombang Rencana	
		Jenis Gelombang	Kala Ulang
1.	Struktur fleksibel (*rubble structure*)	H_S	10-50 tahun
2.	Struktur semi-kaku	$H_{0,1} - H_{0,01}$	10-50 tahun
3.	Struktur kaku (*rigid*)	$H_{0,01} - H_{maks}$	10-50 tahun

Sumber: Yuwono (1992,p.III-1)

Penentuan kala ulang gelombang rencana biasanya didasarkan pada jenis konstruksi yang akan dibangun dan dinilai daerah mana yang akan diamankan. Makin tinggi nilai daerah yang diamankan, maka makin besar pula kala ulang gelombang rencana yang dipilih. Sebagai pedoman penentuan kala ulang gelombang rencana dapat di pakai Tabel 2.1. Dalam perhitungan prediksi gelombang dengan periode kala ulang tertentu di dalam *Coastal Engineering Manual* bagian II-8 diberikan sebuah pedoman penentuan distribusi statistik yang lebih tepat digunakan untuk berbagai macam tipe gelombang atau angin yang di gunakan untuk desain bangunan pantai.

Tabel 2.2
Fungsi distribusi probabilitas untuk hidrodinamik

Parameter	Fungsi Distribusi Representatif
Angin Ekstrim (*extreme wind*)	FT – I
H_S	Weibull
T_P	Weibull
H_S ekstrim (*extreme* H_S)	FT – I, Weibull
Tinggi muka air (*water level*)	Log-Pearson Tipe III

Sumber: Depatrment of the army (2008,p.II-8-14)

2.2.3 Analisa Frekuensi Gelombang

Dalam subbab ini diberikan dua metode untuk memprediksi gelombang dengan periode ulang tertentu, yaitu distribusi Fisher-Tippet I (Gumbel) dan distribusi Weibull. Dalam metode ini prediksi dilakukan untuk memperkirakan tinggi gelombang signifikan dengan berbagai periode ulang. Tidak ada petunjuk yang jelas untuk memilih salah satu dari kedua metode tersebut. Biasanya pendekatan yang dilakukan adalah mencoba beberapa metode tersebut untuk data tersedia dan kemudian dipilih yang memberikan hasil terbaik (Triatmodjo, 1999, p.140).

Kedua distribusi tersebut memiliki bentuk berikut ini :

1 Distribusi Fisher-Tippet Tipe I

$$P\left(H_S \le \overline{H}_S\right) = e^{-e^{-\left(\frac{\overline{H}_S - B}{A}\right)}} \quad (2\text{-}16)$$

2. Distribusi Weibull

$$P\left(H_S \le \overline{H}_S\right) = 1 - e^{-\left(\frac{\overline{H}_S - B}{A}\right)^{\kappa}} \quad (2\text{-}17)$$

Dengan:

$P\left(H_S \le \overline{H}_S\right)$ = probabilitas bahwa $\overline{H}_S$ tidak dilampaui

H = tinggi gelombang representatif (m)

$\overline{H}$ = tinggi gelombang dengan nilai tertentu (m)

A = parameter skala

B = parameter lokasi

κ = parameter bentuk

Data masukan disusun dalam urutan dari besar ke kecil. Selanjutnya probabilitas ditetapkan untuk setiap tinggi gelombang sebagai berikut :

1. Distribusi Fisher-Tippet Tipe I

$$P\left(H_S \le H_{sm}\right) = 1 - \frac{m - 0{,}44}{N_T + 0{,}12} \quad (2\text{-}18)$$

2. Distribusi Weibull

$$P\left(H_S \le H_{sm}\right) = 1 - \frac{m - 0{,}2 - \frac{0{,}27}{\sqrt{\kappa}}}{N_T + 0{,}2 + \frac{0{,}23}{\sqrt{\kappa}}} \quad (2\text{-}19)$$

Dengan :

$P\left(H_S \le H_{sm}\right)$ = probabilitas dari tinggi gelombang representatif ke *m* yang tidak dilampaui

H_{sm} = tinggi gelombang urutan ke-*m*

m = nomor urut tinggi gelombang signifikan = 1,2,…, N

N_T = jumlah kejadian gelombang selama pencatatan (bisa lebih besar dari gelombang representatif)

Parameter A dan B di dalam Persamaan 2.18 dan 2.19 dihitung dari metode kuadrat terkecil untuk setiap tipe distribusi yang digunakan. Hitungan didasarkan pada analisis regresi linier dari hubungan berikut :

$$H_m = \overline{A} y_m + \overline{B} \quad (2\text{-}20)$$

Dimana y_m diberikan oleh bentuk berikut :

Untuk distribusi Fisher-Tippet tipe I

$$y_m = -\ln\{-\ln P(H_S \le H_{sm})\} \quad (2\text{-}21)$$

Untuk distribusi Weibull

$$y_m = \left[-\ln\{1 - P(H_S \le H_{sm})\}\right]^{1/\kappa} \quad (2\text{-}22)$$

Dengan $\overline{A}$ dan $\overline{B}$ adalah perkiraan dari parameter skala dan lokasi yang diperoleh dari analisis regresi linier.

Tinggi gelombang signifikan untuk berbagai periode ulang dihitung dari fungsi distribusi probabilitas dengan rumus berikut ini :

$$H_{sr} = \overline{A} y_r + \overline{B} \quad (2\text{-}23)$$

Dengan y_r diberikan oleh bentuk berikut :

Untuk distribusi Fisher-Tippet tipe I

$$y_r = -\ln\left\{-\ln\left(1 - \frac{1}{LT_r}\right)\right\} \quad (2\text{-}24)$$

Untuk distribusi Weibull

$$y_r = \{\ln(LT_r)\}^{1/\kappa} \quad (2\text{-}25)$$

Dengan :

H_{sr} = tinggi gelombang signifikan dengan periode ulang T_r (m)

T_r = periode ulang (tahun)

κ = panjang data (tahun)

L = rerata jumlah kejadian per tahun = $\frac{N_T}{\kappa}$

Perkiraan interval keyakinan adalah penting dalam analisis gelombang ekstrim. Hal ini mengingat bahwa biasanya periode pencatatan gelombang adalah pendek dan tingkat ketidakpastian yang tinggi dalam perkiraan gelombang ekstrim. Batas keyakinan sangat dipengaruhi oleh penyebaran data, sehingga nilainya tergantung pada deviasi standar. Deviasi standar yang dinormalkan dihitung dengan persamaan berikut (Triatmodjo, 1999:142) :

$$\sigma_{nr} = \frac{1}{\sqrt{N}}\left[1 + \alpha(y_r - c + \varepsilon \ln v)^2\right]^{1/2} \quad (2\text{-}26)$$

Dengan :

σ_{nr} = standar deviasi yang dinormalkan dari tinggi gelombang signifikan dengan periode ulang T_r

N = jumlah data tinggi gelombang signifikan

$$\alpha = \alpha_1 e^{\alpha_2 N^{-1,3} + \kappa\sqrt{-\ln v}} \quad (2\text{-}27)$$

$$v = \frac{N}{N_T} \quad (2\text{-}28)$$

Tabel 2.3
Koefisien untuk Menghitung Deviasi Standar

Distribusi	**α_1**	**α_2**	**κ**	**c**	**E**
FT-1	0,64	9,0	0,93	0,0	1,33
Weibull (k= 0,75)	1,65	11,4	-0,63	0,0	1,15
Weibull (k= 1,0)	1,92	11,4	0,00	0,3	0,90
Weibull (k= 1,4)	2,05	11,4	0,69	0,4	0,72
Weibull (k= 2,0)	2,24	11,4	1,34	0,5	0,54

Sumber: Triatmodjo (1999,p.143)

Besaran absolut dari deviasi standar dari tinggi gelombang signifikan dihitung dengan rumus berikut :

$$\sigma_r = \sigma_{nr}\sigma_{H_s} \quad (2\text{-}29)$$

Dengan :

σ_r = kesalahan standar dari tinggi gelombang signifikan dengan periode ulang T_r

σ_{H_s} = deviasi standar dari data tinggi gelombang signifikan

Interval keyakinan dihitung dengan anggapan bahwa perkiraan tinggi gelombang signifikan pada periode ulang tertentu terdistribusi normal terhadap fungsi distribusi yang diperkirakan. Batas interval keyakinan terhadap H_{sr} dengan berbagai tingkat keyakinan diberikan dalam Tabel 2.4. Perlu diingat bahwa lebar interval keyakinan tergantung pada fungsi distribusi, N, dan v; tetapi berkaitan dengan seberapa baik data mengikuti fungsi distribusi.

Tabel 2.4
Batas Interval Keyakinan Tinggi Gelombang Signifikan Ekstrim

Tingkat keyakinan (%)	Batas Interval Keyakinan terhadap H_{sr}	Probabilitas Batas Atas Terlampaui (%)
80	$1,28\sigma_r$	10,0
85	$1,44\sigma_r$	7,5
90	$1,65\sigma_r$	5,0
95	$1,96\sigma_r$	2,5
99	$2,58\sigma_r$	0,5

Sumber: Triatmodjo (1999,p.144)

2.2.4 Parameter Gelombang

Dengan periode gelombang T_S dan tinggi gelombang H_S dapat dianalisis parameter gelombang yaitu kecepatan rambat dan panjang gelombang di laut dalam. Analisis tersebut dilakukan dengan persamaan (Triatmodjo, 2008, p.17) :

$$C_0 = \frac{gT}{2\pi} = 1{,}56T \tag{2.30}$$

$$L_0 = \frac{gT^2}{2\pi} = 1{,}56T^2 \tag{2.31}$$

Dengan :

L_o = panjang gelombang di laut dalam (m)

C_o = kecepatan rambat gelombang di laut dalam (m)

T = periode gelombang di laut dalam (detik)

g = percepatan gravitasi ($m.dt^{-2}$)

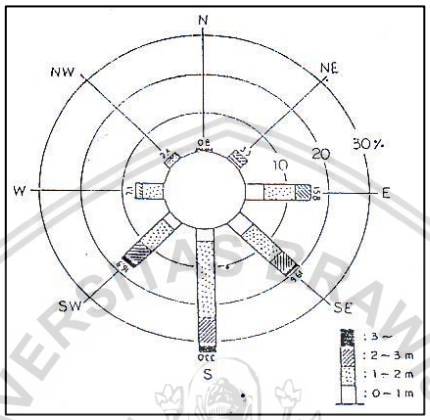
Dari periode gelombang dan tinggi gelombang tersebut dapat diklasifikasikan jenis gelombang yang terjadi dilihat dari perbandingan antara tinggi gelombang dan panjang gelombang yang didapat termasuk jenis *sea* atau *swell* (Yuwono, 1986, p.40).

a. *Sea* adalah gelombang yang terbentuk di daerah pembangkit. Kondisi gelombang di sini adalah curam (*steep*) yaitu panjang gelombang berkisar antara 10 sampai 20 kali lebih tinggi gelombang.
b. *Swell* adalah gelombang yang sudah terbentuk di daerah pembangkit. Kondisi gelombang di sini adalah landai yaitu panjang gelombang berkisar antara 30 sampai 500 kali tinggi gelombang.

2.2.5 Analisa Distribusi Arah Gelombang

Analisa distribusi arah gelombang dilakukan meninjau gelombang yang terjadi pada suatu tempat dari berbagai arah. Arah yang ditinjau biasanya hanya beberapa arah saja dengan interval 45°. Arah gelombang disesuaikan dengan urutan arah mata angin yaitu utara, timur laut, timur, tenggara, selatan, barat daya, barat, dan barat laut.

Prosentase kejadian gelombang arah yang ditinjau dihitung dan ditabelkan, kemudian digambar sebagai mawar gelombang (*wave rose*), sebagai contoh tertera pada Gambar 2.9.



Gambar 2.9 Mawar gelombang SWELL, Samudera Indonesia
Sumber: Yuwono (1992,p.II-11)

2.2.6 Analisa Deformasi Gelombang

Apabila suatu deretan gelombang bergerak menuju pantai, gelombang tersebut akan mengalami perubahan bentuk yang umumnya disebabkan oleh proses refraksi, pendangkalan gelombang, dan gelombang pecah. Perubahan-perubahan bentuk tersebut akan menentukan tinggi gelombang dan pola (bentuk) garis puncak gelombang di suatu tempat di daerah pantai (Triatmodjo, 1999, p.66)

2.2.6.1 Pendangkalan (*Shoaling*)

Gelombang yang merambat dari laut dalam ke pantai akan mengalami transformasi dimana kecepatan rambat gelombang C dan panjang gelombang L bergantung pada kedalaman perairan. Selain perubahan pada kecepatan rambat dan panjang gelombang, tinggi gelombang yang merambat ke pantai juga berubah. Fenomene ini disebut pendangkalan (*shoaling*). Bila diasumsikan tidak ada energi yang hilang, maka tinggi gelombang dapat ditentukan dengan menggunakan prinsip kekekalan fluks energi. Fluks energi di setiap lokasi adalah tetap sehingga fluks energi di perairan dalam akan sama dengan fluks energi di lokasi yang ditinjau (Depatrment of the army, 2010, p.II-3-1).

$$\overline{P_0} = \overline{P_1} = \overline{P_2} = \overline{P}$$
$$\left(\overline{E}Cn\right)_0 = \left(\overline{E}Cn\right) \qquad (2.32)$$

$$\frac{1}{8}\rho g {H_0}^2 C_0 n_0 = \frac{1}{8}\rho g H C n$$

$$\frac{H}{H_0} = \sqrt{\frac{n_0 C_0}{nC}} = \sqrt{\frac{C_0}{2nC}} = K_S \qquad (2.33)$$

Dengan :

H = tinggi gelombang di lokasi yang ditinjau (m)

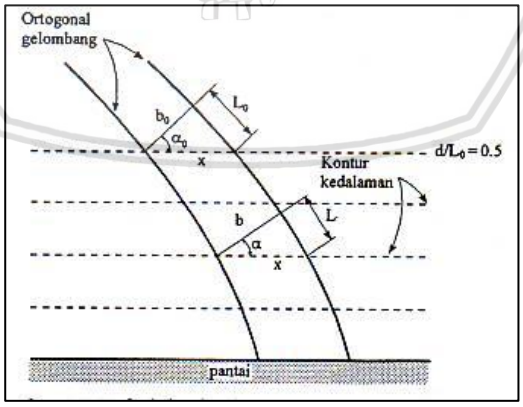
H_0 = tinggi gelombang di perairan dalam (m)

K_S = koefisien *shoaling*

2.2.6.2 Refraksi Gelombang

Kecepatan rambat gelombang bergantung pada kedalaman perairan, dimana gelombang merambat lebih cepat di perairan dengan kedalaman yang lebih besar. Bila gelombang merambat dengan membentuk sudut terhadap kontur dasar perairan, maka terjadi variasi kecepatan rambat gelombang di sepanjang puncak gelombang. Akibatnya gelombang membelok sehingga sudut datang mengecil dan puncak gelombang sejajar dengan kontur dasar perairan ketika gelombang tiba di pantai. Fenomena perubahan arah gelombang ini disebut refraksi (Depatrment of the army, 2010, p.II-3-3).

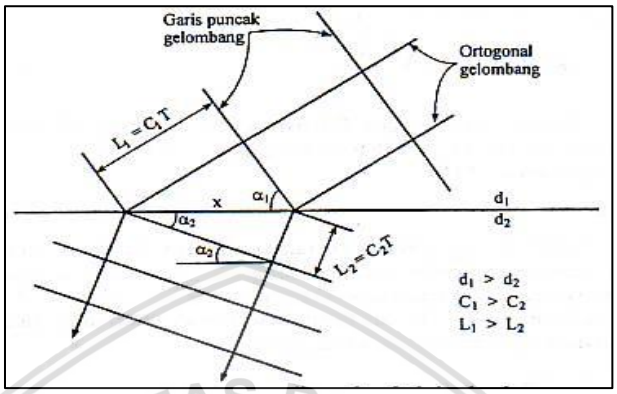
Refraksi dan pendangkalan (*shoaling*) akan menentukan tinggi gelombang di suatu tempat berdasarkan karakteristik gelombang datang. Refraksi mempunyai pengaruh yang cukup besar terhadap tinggi dan arah gelombang serta distribusi energi gelombang di sepanjang pantai dan secara sederhana diilustrasikan dalam Gambar 2.10. (Triatmodjo, 2008, p.67).



Gambar 2.10 Refraksi gelombang pada kontur lurus dan sejajar
Sumber: Triatmodjo (2008,p.69)

Proses refraksi gelombang adalah sama dengan refraksi cahaya yang terjadi karena cahaya melintasi dua media perantara berbeda. Dengan kesamaan tersebut maka pemakaian hukum Snell pada optik dapat digunakan untuk menyelesaikan masalah refraksi gelombang yang disebabkan karena perubahan kedalaman.

Dalam Gambar 2.11, suatu deretan gelombang menjalar dari laut dengan kedalaman d_1 menuju kedalaman d_2, dengan perubahan kedalaman mendadak (seperti anak tangga) dan dianggap tidak ada refleksi gelombang pada perubahan tersebut. Karena adanya perubahan kedalaman maka cepat rambat dan panjang gelombang berkurang dari C_1 dan L_1 menjadi C_2 dan L_2 (Triatmodjo, 2008, p.71).



Gambar 2.11 Hukum Snell unntuk refraksi gelombang
Sumber: Triatmodjo (2008,p.71)

$$\sin \alpha_2 = \left(\frac{C_2}{C_1} \right) \sin \alpha_1 \qquad (2.34)$$

Dengan :

α_1 = sudut antara garis puncak gelombang dengan kontur dasar dimana gelombang melintas.

α_2 = sudut yang sama yang diukur saat garis puncak gelombang melintasi kontur dasar berikutnya.

C_1 = kecepatan gelombang pada kedalaman di kontur pertama.

C_2 = kecepatan gelombang pada kedalaman di kontur kedua.

Apabila ditinjau gelombang di laut dalam dan di suatu titik yang ditinjau, maka :

$$\sin \alpha = \left(\frac{C}{C_0} \right) \sin \alpha_0 \qquad (2.35)$$

Dengan α adalah sudut antara garis puncak gelombang dan garis kontur dasar laut di titik yang ditinjau, dan α_0 adalah sudut antara garis puncak gelombang di laut dalam dan garis pantai.

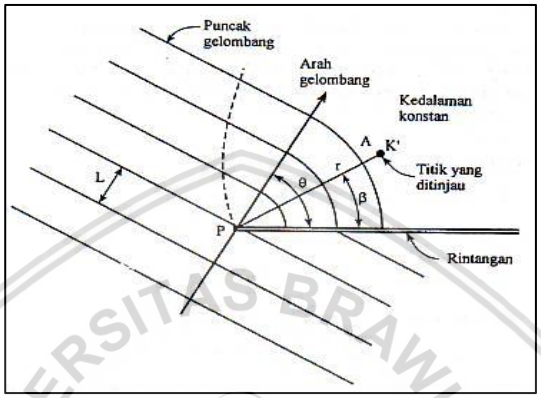
Seperti terlihat dalam Gambar 2.11, jarak antara ortogonal di laut dalam dan di suatu titik adalah b_0 dan b. apabila kontur dasar laut adalah lurus dan sejajar maka jarak x di titik 0 dan di titik berikutnya adalah sama sehingga:

$$x = \frac{b_0}{\cos \alpha_0} = \frac{b}{\cos \alpha}$$

$$Kr = \sqrt{\frac{b_0}{b}} = \sqrt{\frac{\cos\alpha_0}{\cos\alpha}} \qquad (2.36)$$

2.2.6.3 Difraksi Gelombang

Difraksi gelombang terbentuk apabila gelombang datang terhalang oleh suatu rintangan seperti pemecah gelombang atau pulau, maka gelombang tersebut akan membelok di sekitar ujung rintangan dan masuk daerah terlindung di belakangnya, seperti terlihat di Gambar 2.12 (Triatmodjo, 2008, p.79).



Gambar 2.12 Difraksi gelombang di belakang rintangan
Sumber: Triatmodjo (2008,p.79)

Tinggi gelombang di suatu tempat di daerah terlindung tergantung pada jarak titik tersebut terhadap ujung rintangan *r*, sudut antara rintangan dan garis yang menghubungkan titik tersebut dengan ujung rintangan β, dan sudut antara arah penjalaran gelombang dan rintangan θ. Perbandingan antara tinggi gelombang di titik yang terletak di daerah terlindung dan tinggi gelombang datang disebut koefisien difraksi K'.

$$H_A = K' H_P \qquad (2.37)$$

$$K' = f(\theta, \beta, r/L) \qquad (2.38)$$

Dengan :

H_A = tinggi gelombang di titik yang dicari (m)

K' = koefisien difraksi

H_P = tinggi gelombang awal (diujung bangunan penyebab difraksi) (m)

2.2.6.4 Refleksi Gelombang

Gelombang yang dalam perambatannya menemui rintangan, misalnya bangunan laut, bisa dipantulkan secara sempurna (100%) atau hanya sebagian saja sementara sebagian lainnya diserap atau diteruskan melalui rintangan tersebut. Besar kemampaun suatu bangunan memantulkan gelombang diberikan oleh koefisien refleksi, yaitu perbandingan antara tinggi gelombang refleksi H_r dan tinggi gelombang datang H_i (Triatmodjo, 2008, p.91):

$$X = \frac{H_r}{H_i} \qquad (2.39)$$

Dengan :

X = koefisien pantul

H_r = tinggi gelombang pantul (m)

H_i = tinggi gelombang datang (m)

Koefisien refleksi bangunan diperkirakan berdasarkan tes model. Koefisien refleksi berbagai tipe bangunan diberikan dalam Tabel 2.5.:

Tabel 2.5
Koefisien refleksi

Tipe Bangunan	X
Dinding vertikal dengan puncak di atas air	0,7 – 1,0
Dinding vertikal dengan puncak terendam	0,5 – 0,7
Tumpukan batu sisi miring	0,3 – 0,6
Tumpukan blok beton	0,3 – 0,5
Bangunan vertikal dengan peredam energi (diberi lubang)	0,05 – 0,2

Sumber: Triatmodjo (2008,p.91)

2.2.6.5 Gelombang Pecah

Gelombang yang menjalar dari laut dalam menuju pantai mengalami perubahan bentuk karena adanya pengaruh perubahan kedalaman laut. Pengaruh kedalaman laut mulai terasa pada kedalaman lebih dangkal puncak gelombang semakin tajam dan lembah gelombang semakin datar. Selain itu kecepatan dan panjang gelombang berkurang secara berangsur-angsur, sementara tinggi gelombang bertambah.

Apabila gelombang bergerak menuju perairan dangkal, kemiringan batas tersebut tergantung pada kedalaman relatif (d/L) dan kemiringan dasar laut (m). Gelombang dari laut dalam yang bergerak menuju pantai akan bertambah kemiringannya sampai akhirnya tidak stabil dan pecah pada kedalaman tertentu, yang disebut dengan kedalaman gelombang pecah. Pengaruh gelombang pecah dihitung dengan rumus :

$$\frac{H_b}{d_b} = 0{,}78 \qquad (2\text{-}40)$$

Gelombang pecah menurut Galvin, 1968 dalam CEM, 2008 dapat dibedakan menjadi empat tipe berikut ini :

1. *Spilling*

   Spilling biasanya terjadi apabila gelombang dengan kemiringan kecil menuju ke pantai yang relatif landai dimana gelombang mulai pecah pada jarak yang cukup jauh dari pantai kemudian menghasilkan buih.

2. *Plunging*

   Plunging adalah gelombang pecah dengan puncak gelombang melengkung ke arah depan dan kemudian jatuh sampai dasar gelombang.

3. *Collapsing*

   Apabila sebagian puncak gelombang tidak pecah, sementara bagian bawah dari muka gelombang menjadi curam dan jatuh menghasilkan permukaan air yang turbulen tidak teratur. Merupakan transisi antara *plunging* dan *surging*

4. *Surging*

   Apabila sebagian puncak gelombang tidak pecah dan bagian depan dari gelombang terus berjalan ke pantai dengan sedikit pecah. Umumnya terjadi pada pantai dengan kemiringan yang relatif curam.

Gambar 2.13 Tipe-tipe gelombang pecah
Sumber: Depatrment of the army (2008,p.II-4-3)

Jenis gelombang pecah dapat diperkirakan dengan menggunakan parameter tidak berdimensi, *surf similarity parameter* ξ_0 diberikan pada Tabel 2.6. :

$$\xi_0 = \frac{m}{\left(\frac{H_b}{L_0}\right)^{1/2}} \qquad (2\text{-}41)$$

Dengan:

m = kemiringan pantai

H_b = tinggi gelombang pecah (m)

L_0 = panjang gelombang di laut dalam (m)

Tabel 2.6
Jenis Gelombang Pecah Berdasarkan *Surf Similarity Parameter*

Jenis Gelombang Pecah	ξ_0
Spilling	$\xi_0 < 0,5$
Plunging	$0,5 < \xi_0 < 3,3$
Surging/Collapsing	$\xi_0 > 3,3$

Sumber: Depatrment of the army (2008,p.II-4-3)

2.3 Pasang Surut

Pasang surut adalah fluktuasi muka air laut karena adanya gaya menarik benda-benda di langit, teutama matahari dan bulan terhadap massa air laut di bumi. Meskipun massa bulan jauh lebih kecil daripada massa matahari, tapi karena jaraknya terhadap bumi jauh lebih dekat, maka pengaruh gaya tarik bulan terhadap bumi jauh lebih besar daripada pengaruh gaya tarik matahari. Gaya tarik bulan yang mempengaruhi pasang surut adalah 2,2 kali lebih besar daripada gaya tarik matahari.

Pengetahuan tentang pasang surut penting dalam perencaan bangunan pantai dan pelabuhan. Elevasi muka air tertinggi (pasang) dan elevasi muka air terendah (surut) sangat penting untuk merencanakan bangunan tersebut. Sebagai contoh, elevasi puncak bangunan pemecah gelombang, dermaga, dsb ditentukan oleh elevasi muka air pasang. Sementara kedalaman alur pelayaran pada pelabuhan ditentukan oleh muka air surut.

2.3.1 Tipe Pasang Surut

Secara umum tipe pasang surut dapat dikelompokkan menjadi 4, yaitu :

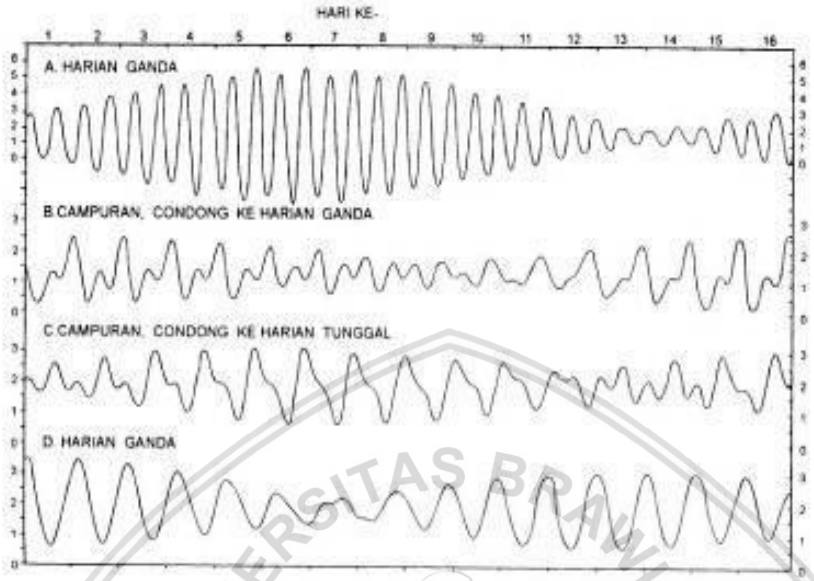
1. Pasang surut harian ganda (*semi diurnal tide*)

   Dalam satu hari terjadi dua kali pasang surut yang tinggi gelombangnya hampir sama dan pasang surut yang terjadi secara berurutan dan teratur. Periode pasang surut ini rata-rata adalah 12 jam 24 menit.
2. Pasang surut harian tunggal (*diurnal tide*)

   Dalam satu hari terjadi satu kali pasang dan satu kali surut. Periode pasang surut jenis ini adalah 24 jam 50 menit.
3. Pasang surut campuran cenderung ganda (*mixed tide prevailing semidiurnal*)

   Dalam satu hari terjadi dua kali pasang dan dua kali surut, namun tinggi gelombangnya berbeda, begitu juga periode gelombangnya.
4. Pasang surut campuran cenderung tunggal (*mixed tide prevailing diurnal*)

Pada tipe ini, terjadi satu kali pasang dan satu kali surut dalam sehari. Tetapi kadang-kadang, untuk sementara waktu terjadi dua kali pasang dan dua kali surut dengan periode dan tinggi gelombang yang berbeda.



Gambar 2.14 Tipe pasang surut
Sumber : Triatmodjo (1999,p.67)

2.3.2 Elevasi Muka Air Laut

Dalam analisa pasang surut diperlukan suatu elevasi yang dapat digunakan sebagai pedoman dalam perencanaan suatu pelabuhan. Ada tiga macam elevasi antara lain:

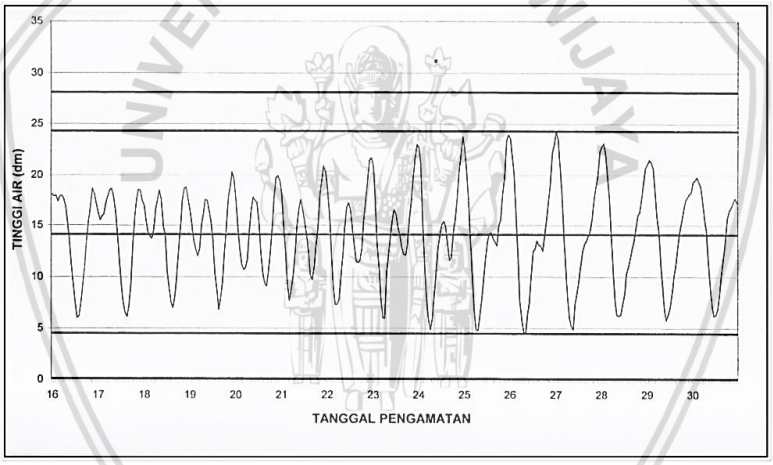
1. Muka air tinggi atau *High Water Level* (HWL), muka air tertinggi yang dicapai pada saat air pasang dalam satu siklus pasang surut;
2. Muka air rendah atau *Low Water Level* (LWL), kedudukan air terendah yang dicapai pada saat air surut dalam satu siklus pasang surut;
3. Muka air tinggi rerata atau *Mean High Water Level* (MHWL), rerata dari muka air tertinggi selama periode 19 tahun;
4. Muka air rendah rerata atau *Mean Low Water Level* (MLWL), adalah rerata dari muka air rendah selama periode 19 tahun;
5. Muka air rata-rata atau *Mean Sea Level* (MSL), muka air rerata antara muka air tinggi rerata dan muka air rendah rerata.
6. Muka air tinggi tertinggi atau *Highest High Water Level* (MHWL), air tertinggi pada saat pasang surut purnama atau bulan mati;
7. Air rendah terendah atau *Lowest Low Water Level* (LLWL), air terendah pada saat pasang surut purnama atau bulan purnama.

2.3.3 Elevasi Muka Air Pasang Surut Rencana

Perencanaan bangunan pantai dibatasi oleh waktu, biasanya 6 bulan sampai satu tahun atau lebih. Dengan demikian untuk mendapatkan data pasang surut dilokasi pekerjaan sepanjang 19 tahun tidak dapat dilakukan. Dalam hal ini muka air laut ditentukan berdasarkan pengukuran pasang surut selama minimum 15 hari.

Dengan pengamatan selama 15 hari tersebut, maka didapat siklus pasang surut yang meliputi pasang purnama dan perbani. Pengamatan muka air ini dapat menggunakan alat otomatis (automatic water level recorder) atau secara manual dengan bak ukur dengan interval pengamatan setiap jam, siang dan malam. Untuk dapat melakukan pembacaan dengan baik tanpa terpengarauh gelombang, maka pengamatan dilakukan di tempat terlindung, seperti muara sungai atau teluk.

Dari data pengamatan selama 15 hari atau 30 hari dapat diramalkan pasang surut untuk periode berikutnya dengan menggunakan metode Admiralty atau metode kuadrat terkecil (*least square method*).



Gambar 2.15 Kurva pasang surut
Sumber : Triatmodjo (1999, p.67)

2.4 Bangunan Pengaman Pantai

Salah satu masalah yang ada di daerah pantai adalah abrasi pantai. Abrasi pantai dapat menimbulkan kerugian sangat besar dengan rusaknya kawasan pemukiman dan fasilitas-fasilitas yang ada di daerah tersebut.

Untuk menanggulangi abrasi pantai, langkah pertama yang harus dilakukan adalah mencari penyebab terjadinya abrasi. Dengan mengetahui penyebabnya, selanjutnya dapat ditentukan cara penanggulangannya, yang biasanya adalah dengan membuat bangunan pengaman pantai.

Bangunan pengaman pantai digunakan untuk melindungi pantai terhadap kerusakan karena serangan gelombang dan arus. Ada beberapa cara yang dapat dilakukan untuk melindungi pantai, yaitu :

1. Memperkuat/melindungi pantai agar mampu menahan serangan gelombang,
2. Mengubah laju transport sedimen sepanjang pantai,
3. Mengurangi energi gelombang yang sampai ke pantai,
4. Reklamasi dengan menambah suplai sedimen ke pantai atau dengan cara lain.

Sesuai dengan fungsinya seperti di atas, bangunan pantai dapat diklasifikasikan dalam tiga kelompok yaitu :

1. Konstruksi yang dibangun di pantai dan sejajar dengan garis pantai,
2. Konstruksi yang dibangun kira-kira tegak lurus pantai dan sambung ke pantai,
3. Konstruksi yang dibangun di lepas pantai dan kira-kira sejajar dengan garis pantai.

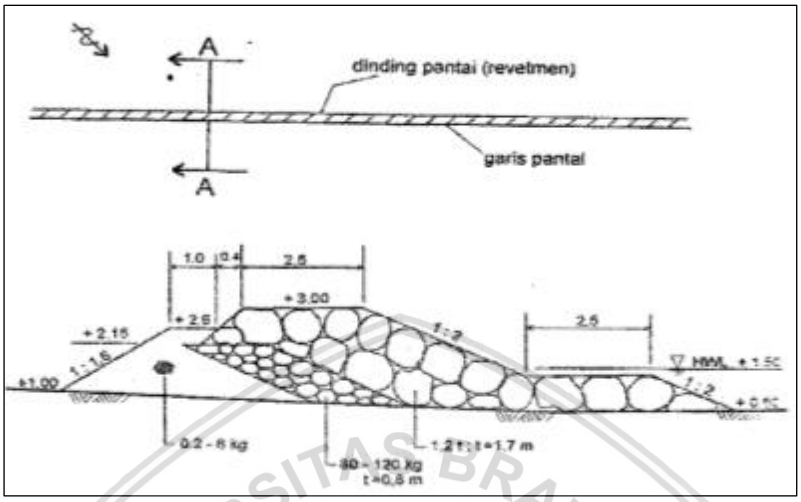
Bentuk konservasi pantai dengan cara pembuatan struktur pengaman pantai buatan adalah dengan *hard structure* dan *soft structure*. *Hard structure* di desain dengan kondisi yang stabil dan tetap, menahan ombak, arus dan transport sedimen secara penuh. Oleh karena itu, *hard structure* memberikan pengaruh yang lebih besar terhadap perpindahan pasir atau sedimentasi secara alami. Sedangkan alternatif pemakaian *soft structure* diharapkan merupakan struktur yang dapat bergerak dinamis, seiring dengan kondisi ombak dan arus. Seperti contoh di atas, yang termasuk dalam *hard structure* adalah groin, revetment, dan *breakwater*. Sedangkan *soft structure* adalah *beach nourishment* dan penghijauan daerah pantai untuk meningkatkan stabilitas pantai.

Perkuatan tebing (revetment) adalah bangunan yang memisahkan daratan dan perairan pantai dan ditempatkan sejajar atau hampir sejajar dengan garis pantai yang memisahkan daratan dan lautan. Fungsinya ialah untuk menahan tanah dan melindungi daratan terhadap erosi karena hempasan gelombang dan limpasan gelombang (overtopping) ke darat. Bangunan ini hanya akan melindungi tanah yang berada di belakangnya dan tidak melindungi daerah disebelahnya. Permukaan bangunan yang menghadap arah datangnya gelombang dapat berupa sisi vertikal atau miring. Dinding pantai biasanya berbentuk dinding vertikal, sedang revetment mempunyai sisi miring (Triatmodjo, 1999, p.205).

Dalam perencanaan bangunan ini perlu ditinjau kegunaan dan bentuk bangunan, lokasi bangunan di garis pantai, panjang, tinggi elevasi muka air dan sebagainya.

Salah satu fungsi utama revetment adalah menahan terjadinya limpasan gelombang. Air yang melimpas melewati puncak dan jatuh di belakang bangunan akan menyebabkan terjadinya piping, karena aliran air yang terinfiltrasi akan menarik

butiran tanah di belakang bangunan. Untuk menanggulangi keadaan tersebut dapat dilakukan beberapa cara, misalnya dengan membuat elevasi puncak bangunan cukup tinggi sehingga tidak terjadi limpasan atau dengan melindungi tanah di belakang bangunan dengan lantai beton atau aspal lengkap dengan drainasi.



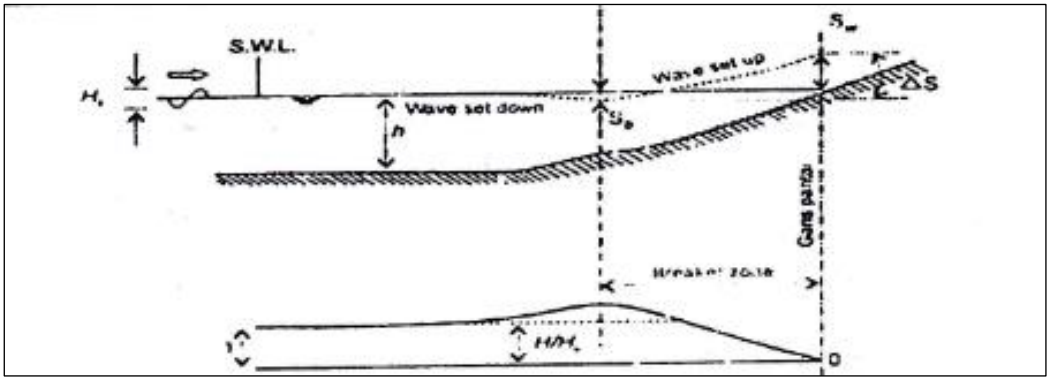
Gambar 2.16 Revetment (dinding pantai) sebagai pelindung erosi pantai
Sumber: Triatmodjo (1999,p.206)

2.5 Tinggi Bangunan Pantai

Tinggi suatu bangunan pantai ditentukan oleh beberapa proses alam yang terjadi dalam waktu yang bersamaan membentuk variasi muka air laut dengan periode panjang. Proses alam tersebut meliputi tsunami, gelombang badai (*strom surge*), kenaikan muka air karena gelombang (*wave set-up*), kenaikan muka air karena perubahan suhu global, dan pasang surut. Di antara beberapa proses tersebut, fluktuasi muka air laut karena badai dan tsunami (gempa) tidak dapat ditentukan kapan terjadinya, sedangkan pasang surut mudah diprediksi dan diukur baik besar maupun waktu terjadinya (Triatmodjo, 1999, p.99).

2.5.1 Kenaikan Muka Air Laut karena Gelombang (*Wave Set-Up*)

Gelombang yang datang dari air laut menuju pantai menyebabkan fluktuasi muka air di daerah pantai terhadap muka air diam. Pada waktu gelombang pecah akan terjadi penurunan elevasi muka air rerata terhadap elevasi muka air diam di sekitar lokasi gelombang pecah. Kemudian dari titik gelombang pecah permukaan air miring ke atas ke arah pantai. Turunnya muka air tersebut dikenal dengan *wave setdown*, sedangkan naiknya muka air disebut *wave setup*.



Gambar 2.17 *Wave setup* dan *wave setdown*
Sumber: Triatmodjo (1999,p.107)

Besarnya *wave setup* di pantai dapat dihitung dengan menggunakan teori Longuet-Higgins dan Stewart (1963) menggunakan persamaan berikut (Triatmodjo, 1999, p.108) :

$$S_w = 0{,}19.\left[1 - 2{,}82.\sqrt{\frac{H_b}{g.T^2}}\right].H_b \qquad (2\text{-}46)$$

Dengan :

S_w = *Wave setup* di pantai (m)

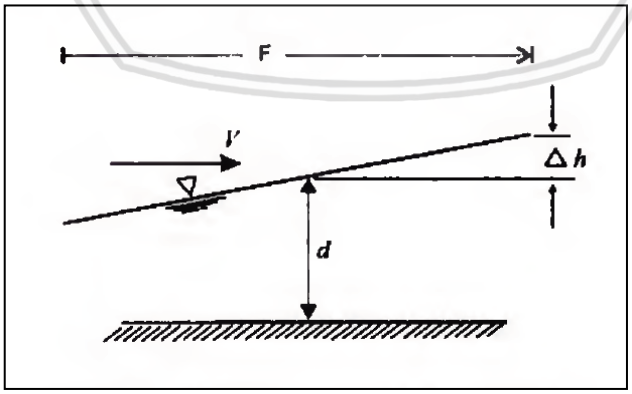
T = periode gelombang (detik)

H_b = tinggi gelombang pecah (m)

g = percepatan gravitasi (m/detik^2)

2.5.2 Kenaikan Muka Air Laut Akibat Angin (*Wind setup*)

Angin dengan kecepatan besar (badai) yang terjadi di atas permukaan laut bisa membangkitkan fluktuasi muka air laut yang berasal di sepanjang pantai jika badai tersebut cukup kuat dan daerah pantai dangkal dan luas. Besar perubahan elevasi muka air tergantung pada kecepatan angin, *fetch*, kedalaman air dan kemiringan dasar.



Gambar 2.18 Muka air laut karena badai
Sumber: Triatmodjo (1999,p.110)

$$\Delta h = \frac{Fi}{2} = Fc\frac{V^2}{2gd} \qquad (2\text{-}47)$$

Dengan:

Δh = Kenaikan elevasi muka air karena badai (m)

F = panjang *fetch* (m)

i = kemiringa muka air

c = konstanta = 3,5 x 10^{-6}

V = kecepatan angina (m/d)

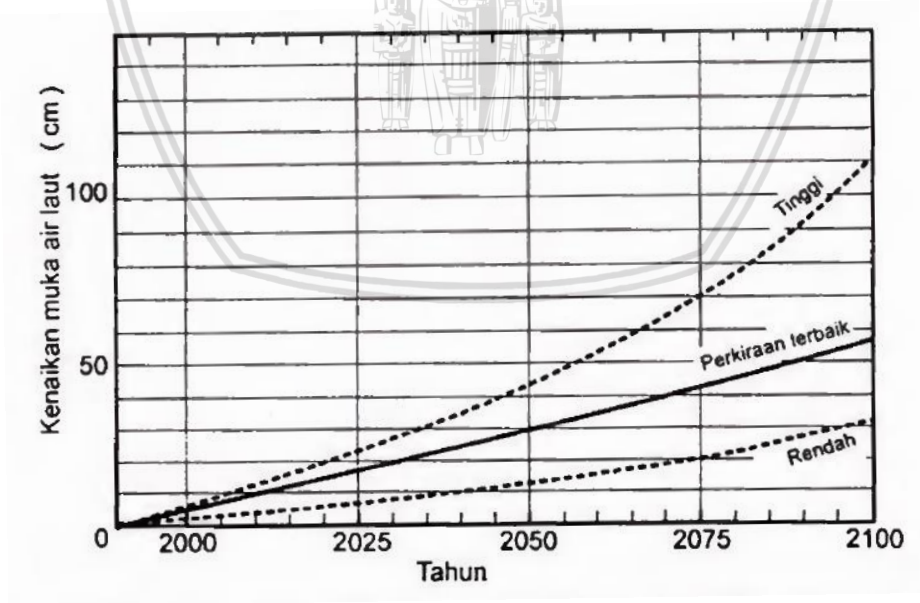
d = kedalaman air (m)

g = percepatan gravitasi (m/dt^2)

Dalam memperhitungkan *wind setup* di daerah pantai dianggap bahwa laut dibatasi oleh sisi pantai yang *impermeabel* dan hitungan dilakukan untuk kondisi arah tegak lurus.

2.5.3 Kenaikan Muka Air Laut Akibat Pemanasan Global

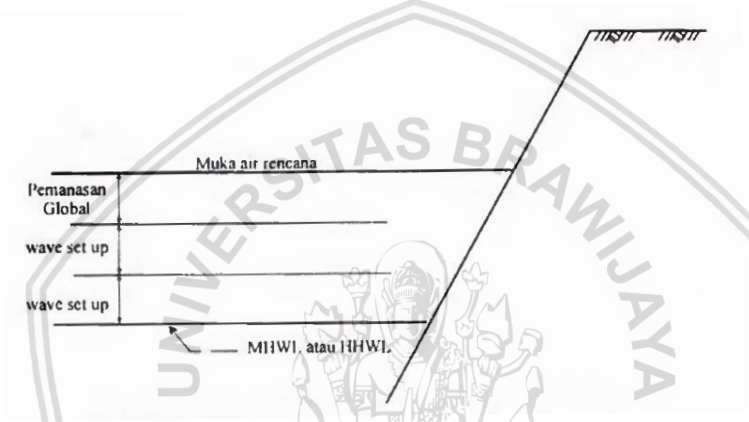
Peningkatan konsentrasi gas-gas rumah kaca di atsmosfer meyebabkan kenaikan suhu bumi sehingga mengakibatkan kenaikan muka air laut. Di dalam perencanaan bangunan pantai, kenaikan muka air karena pemanasan global ini harus diperhitungkan. Gambar 2.19 memberikan perkiraan batas atas dan bawah. Gambar tersebut berdasarkan anggapan bahwa suhu bumi meningkat seperti yang terjadi pada saat ini, tanpa adanya tindakan untuk mengatasi.



Gambar 2.19 Perkiraan kenaikan muka air laut karena pemanasan global
Sumber: Triatmodjo (1999,p.115)

2.5.4 Muka Air Laut Rencana

Elevasi muka air laut rencana merupakan parameter sangat penting di dalam perencanaan bangunan pantai. Elevasi tersebut merupakan penjumlahan dari beberapa parameter yang telah dijelaskan di depan yaitu pasang surut, *wave setup*, *wind setup*, dan kenaikan muka air karena perubahan suhu global. Kemungkinan kejadian air pasang dan gelombang besar (badai) dalam waktu bersamaan adalah sangat besar. Dengan demikaian pasang surut merupakan faktor terpenting di dalam menentukan elevasi muka air laut rencana. Penetapan berdasar muka air tinggi rerata (*mean high water level*, MHWL) atau muka air tinggi tertinggi (*highest high water level*, HHWL) tergantung pada kepentingan bangunan yang direncanakan.



Gambar 2.20 Elevasi muka air laut rencana tanpa stunami
Sumber: Triatmodjo (1999,p.127)

Sebagai pedoman untuk menentukan kedalaman air rencana bangunan DWL (*Design water level*) dapat digunakan persamaan berikut:

DWL = HHWL + *wave set-up* + *strom surge atau wind set-up* +SLR (2-48)

Dengan:

DWL = muka air laut rencana (m)

HHWL = muka air pasang tertinggi (*Highest High Water Level*)

SLR = kenaikan muka air laut rencana (*Sea Level Rise*)

2.5.5 *Run-up* Gelombang

Pada waktu gelombang menghantam suatu bangunan, gelombang tersebut akan naik (*run-up*) pada permukaan bangunan. Elevasi (tinggi) bangunan yang direncanakan tergantung pada *run-up* dan limpasan yang diijinkan. *Run-up* tergantung pada bentuk dan kekasaran bangunan, kemiringan dasar laut di depan bangunan, dan karakteristik gelombang. Karena banyaknya variabel yang berpengaruh, maka besarnya *run-up* sangat sulit ditentukan secara analitis.

Berbagai penelitian tentang *run-up* gelombang telah dilakukan di laboratorium. Hasil penelitian berikut berupa grafik-grafik yang dapat digunakan untuk menentukan tinggi *run-up*. Gambar dibawah merupakan hasil percobaan yang dilakukan oleh Irribaren untuk menentukan besar *run-up* gelombang pada bangunan dengan permukaan miring untuk berbagai tipe material, sebagai fungsi bilangan Irribaren untuk berbagai jenis lapis lindung yang mempunyai bentuk berikut :

$$I_r = \frac{\tan\theta}{(H/L_0)^{0,5}} \qquad (2\text{-}49)$$

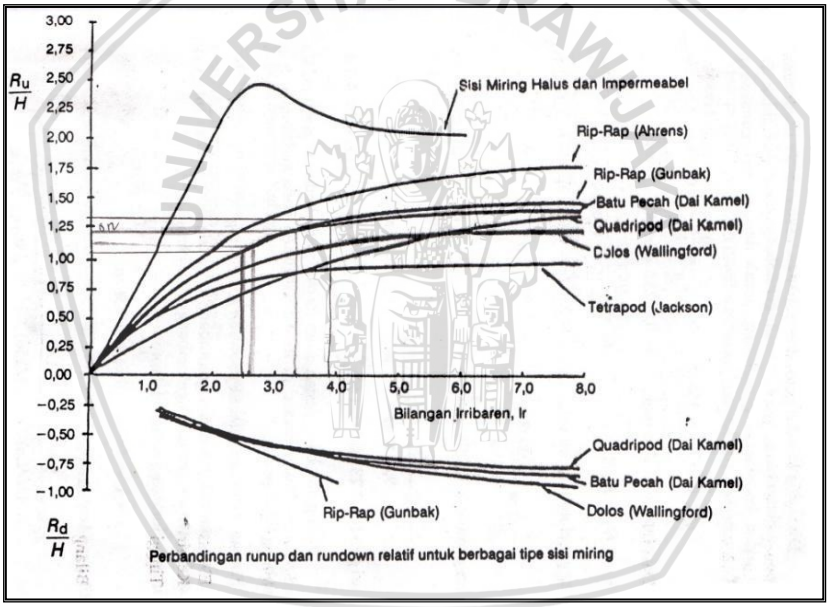
Dengan :

Ir : bilangan Irribaren

θr : sudut kemiringan sisi *seawall*

H : tinggi gelombang di lokasi bangunan

L_0 : panjang gelombang di laut dalam



Gambar 2.21 Grafik *run-up* gelombang
Sumber : Triatmodjo (1999,p.110)

Grafik tersebut juga dapat digunakan untuk menghitung *run-down* (Rd) yaitu turunnya permukaan air karena gelombang pada sisi *retainingwall*. Kurva pada gambar tersebut mempunyai bentuk tak berdimensi untuk *run-up* relatif R_u/H atau R_d/H sebagai fungsi dari bilangan Irribaren, di mana R_u dan R_d adalah *run-up* dan *run-down* yang dihitung dari muka air laut rerata.

2.6 Stabilitas Bangunan

2.6.1 Stabilitas Lereng Terhadap Pergeseran Lengkung Atau Gelincir

Stabilitas lereng dipengaruhi oleh gaya-gaya yang bekerja pada lereng itu sendiri, yaitu gaya penggerak dan gaya penahan. Perbandingan gaya penggerak dan gaya penahan merupakan parameter dalam menentukan faktor keamanan (Fs) suatu lereng. Jika nilai FS > 1, maka lereng dianggap aman. Jika Fs = 1 lereng dalam keadaan seimbang atau dalam keadaan akan longsor. Jika Fs < 1, maka lereng dianggap tidak aman. Perhitungan stabilitas pergeseran lengkung dapat dilakukan dengan menggunakan persamaan sebagai berikut (Yuwono,1992, p.VI-18) :

$$\frac{R\sum(c.L + \tan\phi\,(W^1+V)\cos\alpha}{\sum((W+V)x) + (H.a)} \geq Fs \qquad (2\text{-}50)$$

Dengan :

Fs = faktor aman

c = kohesi bahan

L = panjang dasar potongan yang ditinjau (m)

Φ = sudut geser dalam (°)

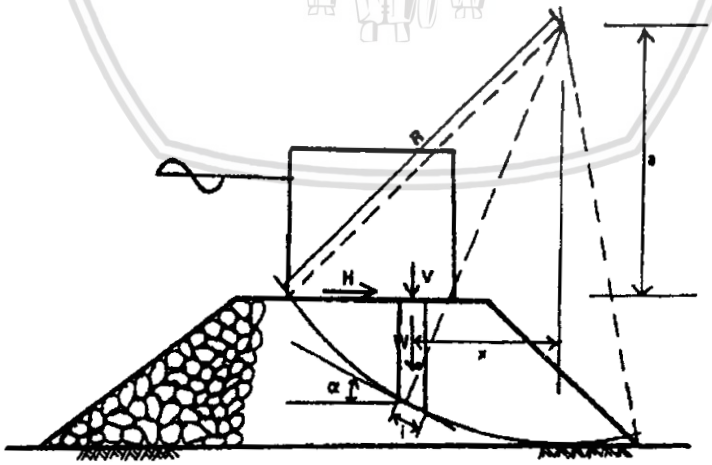
R = jari-jari lingkaran

W^1 = berat potongan tanpa air (kg/m)

W = berat potongan yang ditinjau (kg/m)

V = gaya vertikal (kg/m)

H = gaya horizontal (kg/m)



Gambar 2.22 Gaya-gaya bidang gelincir pada bangunan pelindung pantai
Sumber: Yuwono (1992,p.VI-18)

2.6.2 Stabilitas Lereng Terhadap Geser

Gaya-gaya yang menggeser dinding penahan tanah akan ditahan oleh gesekan antara tanah dan dasar pondasi serta tekanan tanah pasif bila di depan dinding penahan terdapat tanah timbunan.

☆ Keadaan Normal

$$Sf = (f \,.\, \sum V) / \sum H \; > 1.5 \qquad (2\text{-}53)$$

☆ Keadaan Gempa

$$Sf = (f \,.\, \sum V) / \sum H \; > 1.3 \qquad (2\text{-}54)$$

Dengan :

F = koefisien geser (tg ϕ)

$\sum V$ = jumlah gaya vertikal

$\sum H$ = jumlah gaya horisontal

2.6.3 Stabilitas Terhadap Daya Dukung Tanah

Kontrol ini dipakai untuk mengetahui apakah tanah dibawah bangunan dapat menahan berat sendiri konstruksi bangunan tersebut. Untuk dasar pondasi menerus, besar daya dukung tanah dasar menurut Terzaghi adalah sebagai berikut :

$$qu = c.\, Nc + 0{,}5.\gamma.B.N\gamma + \gamma.Df.Nq \qquad (2\text{-}55)$$

Persamaan daya dukung pondasi diatas hanya dapat digunakan untuk perhitungan daya dukung ultimit pondasi memanjang. Oleh karena itu, Terzaghi memberikan pengaruh faktor bentuk terhadap daya dukung ultimit yang didasarkan pada analisa pondasi memanjang sebagai berikut :

- Untuk pondasi bujur sangkar :

  $$qu = 1{,}3c.\, Nc + 0{,}4.\gamma.B.N\gamma + \gamma.Df.Nq \qquad (2\text{-}56)$$

- Untuk pondasi lingkaran :

  $$qu = 1{,}3c.\, Nc + 0{,}3.\gamma.B.N\gamma + \gamma.Df.Nq \qquad (2\text{-}57)$$

- Untuk pondasi persegi panjang :

  $$qu = c.\, Nc\,(1+0{,}3\; B/L) + 0{,}5.\gamma.B.N\gamma\,(1-0{,}2B/L) + \gamma.Df.Nq \qquad (2\text{-}58)$$

Dengan :

qu = daya dukung ultimit untuk pondasi memanjang (kN/m^2)

c = kohesi tanah (kN/m^2)

Df = kedalaman pondasi yang tertanam di dalam tanah (m)

γ = berat volume tanah (kN/m^3)

po = γ.Df = tekanan *overburden* pada dasar pondasi (kN/m^2)

B = lebar atau diameter pondasi (m)

L = panjang pondasi (m)

Nc = faktor daya dukung tanah akibat kohesi tanah

Nq = faktor daya dukung tanah akibat beban terbagi rata

N γ = faktor daya dukung tanah akibat berat tanah

Syarat kestabilan daya dukung tanah adalah sebagai berikut :

$$Qult = ql \; x \; B \tag{2-59}$$

$$\text{Qijin} = \frac{\text{Qult}}{SF} \tag{2-60}$$

$$W = A \times \gamma \; armour \tag{2-61}$$

Dengan :

γtanah = berat jenis tanah (t/m^3)

γw = berat jenis air laut (t/m^3)

γarmour = berat jenis batu pelindung (t/m^3)

D = kedalaman pondasi (m)

B = lebar pondasi (m)

W = berat sendiri konstruksi (t/m)

Nc, Nq, Ng = faktor daya dukung yang merupakan fungsi dari sudut geser tanah ϕ

Tabel 2.7
Hubungan antara sudut geser dan faktor daya dukung

Φ	Nc	Nq	Nγ	Nc'	Nq'	Nγ'
0	5,7	1,0	0,0	5,7	1	0
5	7,3	1,6	0,5	6,7	1,4	0,2
10	9,6	2,7	1,2	8	1,9	0,5
15	12,9	4,4	2,5	9,7	2,7	0,9
20	17,7	7,4	5,0	11,8	3,9	1,7
25	25,1	12,7	9,7	14,8	5,6	3,2
30	37,2	22,5	19,7	19	8,3	5,7
34	52,6	36,5	35,0	23,7	11,7	9
35	57,8	41,4	42,4	25,2	12,6	10,1
40	95,7	81,3	100,4	34,9	20,5	18,8
45	172,3	173,3	297,5	51,2	35,1	37,7
48	258,3	287,9	780,1	66,8	50,5	60,4
50	347,6	415,1	1153,2	81,3	65,6	87,1

Sumber: Bowles (1997,p.182)

2.7 Pondasi

Pondasi merupakan bagian dari struktur yang berfungsi meneruskan beban menuju lapisan tanah pendukung dibawahnya. Kriteria perencanaan untuk kapasitas daya dukung pondasi adalah bahwa daya dukung pondasi harus lebih besar daripada beban luar yang bekerja pada pondasi.

2.7.1 Pondasi Tiang Pancang

Tiang pancang digunakan sebagai pondasi apabila daya dukung tanah dilapisan atas tidak memenuhi untuk mendukung struktur di atasnya. Ukuran dan jumlah tiang pancang yang akan digunakan tergantung pada pondasi ditentukan oleh kapasitas aksial dan lateral dari tiang pancang yang tergantung pada karakteristik tanah.

2.7.1.1 Kapasitas Daya Dukung Tiang Tunggal

Kapasitas daya dukung tinag dapat diperoleh dari data uji kerucut statis (CPT) sondir ataupun SPT (*Standart Penetration Test*). Hasil percobaan pada SPT ini merupakan perkiraan kasar jadi bukan nilai yang teliti. Dalam pelaksanaan umumnya hasil sondir lebih dapat di percaya dari pada percobaan SPT.

a. Kapasitas daya dukung berdasarkan kekuatan bahan dan tanah

Bila lapisan tanah keras letaknya sangat dalam sehingga pembuatan dan pemancangan tiang sampai lapisan tanah keras sanga sukar di laksanakan, maka dalam hal ini kita pergunakan tinagn pancang yang daya dukungnya berdasarkan perletakan antara tiang dengan tanah (Sardjono, 1991, p.42)

- Daya dukung berdasarkan kekuatan bahan

$$P_{tiang} = A_{tiang} \times \sigma_{ijin} \quad (2\text{-}62)$$

Dengan:

P_{tiang} : kekuatan yang di ijinkan pada tiang pancang (ton)

A_{tiang} : luas penampang tiang pancang (m^2)

σ_{ijin} : tegangan tekan ijin bahan tiang (ton/m^2)

- Terhadap kekuatan tanah non kohesif

Menurut Mayerhoff, perhitungan daya dukung tanah menggunakan data SPT pada tanah non kohesif dapat dituliskan seperti dibawah ini (Christady, 2011, p.185):

$$Q_p = 40 \cdot Nb \cdot Ap \cdot L/d \quad (2\text{-}63)$$

Kemudian untuk tahan geser selimut tiang pada tanah non kohesif adalah:

$$Q_s = 2. \text{N-SPT} \cdot p. L \quad (2\text{-}64)$$

Dengan:

Q_p : daya dukung ujung tiang pancang (kN)

Q_s : daya dukung selimut tiang pancang (kN)

Nb : nilai N-SPT rata-rata pada elevasi dasar tiang pancang (m^2)

Nb = (N1 + N2)/2

N1 : nilai SPT pada kedalaman 3D pada ujung tiang ke bawah

N2 : nilai SPT pada kedalaman 8D pada ujung tiang ke atas

p : keliling tiang

d : diameter tiang (m)

L : kedalaman penetrasi tiang (m)

Ap : luas penampang dasar tiang pancang (m^2)

Sehingga besarnya daya dukung total dan izin adalah sebagai berikut:

$$Q_{ult} = Q_p + Q_s \quad (2\text{-}65)$$

$$Q_{izin} = \frac{Qult}{3} \quad (2\text{-}66)$$

2.7.1.2 Kapasitas Daya Dukung Tiang Kelompok

Daya dukung kelompok tiang tidak selalu sama dengan jumlah daya dukung tiang tunggal yang berada dalam kelompok. Untuk itu ada efisiensi yang digunakan untuk menghitung daya dukung kelompok tiang (Suroso, 2007, p.157).

Untuk menghitung daya dukung kelompok tiang menggunakan rumus:

$$Q_{ag} = E_g \times N \times Q_a \quad (2\text{-}67)$$

Dengan:

Q_{ag} = daya dukung kelompok tiang

E_g = efisiensi kelompok tiang

N = jumlah tiang dalam baris

Q_a = daya dukung tiang tunggal

Converse – Labarre mengembangkan rumus untuk menghitung efisiensi. Rumus ini banyak di gunakan walupun di dalam mengembangkan rumus ini hanya sedikit dukungan data.

$$E_g = 1\text{-}\theta \frac{(n - 1)\, m + (m - 1)\, n}{90mn} \quad (2\text{-}68)$$

$$\theta = \arctan \frac{d}{s} \quad (2\text{-}69)$$

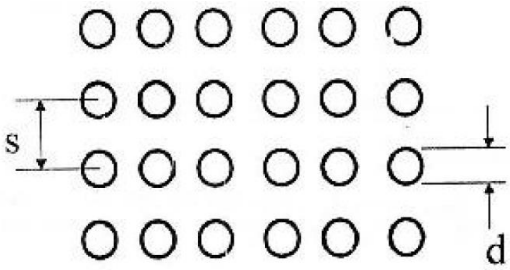
Dengan :

d = diameter tiang (m)

s = jarak tiang (m)

n = jumlah tiang dalam baris

m = jumlah baris tiang



Gambar 2.23 Penjelasan parameter kelompok tiang
Sumber: Suroso (2007,p.158)

2.7.2 Penurunan Pondasi (*Settlement*)

2.7.2.1 Penurunan pada Pondasi Menerus

Penurunan pada pondasi menerus dihitung mengunakan metode elastik yang digunakan untuk tanah berbutir dan dievaluasi mengunankan semiiperikal mengunakan faktor mempengaruhi regangan yang diusulkan oleh Schmertmann (1978) adalah:

$$Se = C_1 C_2 (\bar{q} - q) \sum \left(\frac{Iz}{Es} \right) \Delta z \qquad (2\text{-}70)$$

$$C_1 = 1 - 0{,}5 \left(\frac{q}{\bar{q} - q} \right) \qquad (2\text{-}71)$$

$$C_2 = 1 + 0{,}2 \log \left(\frac{T}{0{,}1} \right) \qquad (2\text{-}72)$$

Dengan:

Se = penurunan pada pondasi menerus (m)

C_1 = koreksi faktor kedalaman pondasi

C_2 = koreksi faktor *creep* atau rangkak dalam tanah

T = waktu (tahun)

q = γD_f (kN/m^2)

$\bar{q}$ = berat beban yang ditahan oleh pondasi (kN/m^2)

D_f = kedalaman pondasi (m)

γ = berat jenis tanah (ton/m^3)

Iz = faktor regangan

Es = modulus elastisitas tanah (kN/m^2)

Δz = selisih kedalam tiap *section* (m)

B = lebar pondasi (m)

2.7.2.2 Penurunan pada Pondasi Tiang Pancang

Perhitungan penurunan elastik pada tiang tunggal dapat menggunkan persamaan berikut:

$$Se_1 = \frac{(Q_p + \xi Q_s)L}{A_p E_p} \quad (2\text{-}73)$$

$$Se_2 = \frac{Q_p C_p}{d.q_p} \quad (2\text{-}74)$$

$$Se_3 = \frac{Q_s C_s}{L.q_p} \quad (2\text{-}75)$$

$$S = Se_1 + Se_2 + Se_3 \quad (2\text{-}76)$$

Dengan:

S = penuruan elastik total (m)

Se_1 = penurunan batang tiang pancang (m)

Se_2 = penurunan tiang akibat beban diujung tiang (m)

Se_3 = penurunan tiang akibat beban yang tersalurkan sepanjang tiang (m)

Q_p = kapasitas daya dukung ujung tiang (kN/m^2)

Q_s = kapasitas daya dukung tahanan kulit (kN/m^2)

ξ = koefisien dari *skin friction*

A_p = luas penampang tiang (m^2)

E_p = modulus elastisitas material tiang (kN/m^2)

L = panjang tiang (m)

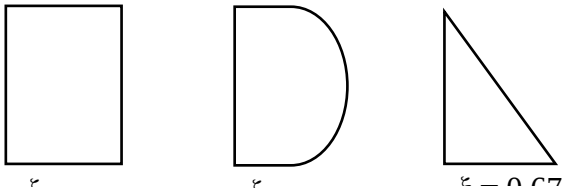
D = diameter tiang (m)

q_p = tahan ujung batas tiang

Cp = koefisien empiris

Cs = konstanta empiris = $\left(0{,}93 + 0{,}16\sqrt{\frac{L}{D}}\right)C_p$

Penentuan nilai koefisien *skin friction* didasarkan pada distribusi tahan sepanjang tiang.



Gambar 2.24 Nilia ξ untuk tiap distribusu tahanan sepanjang tiang
Sumber: Bahan mata kuliah pondasi oleh Ibu Yulvi Zaika (2015)

Untuk menentukan Cp menurut Vesic (1977) sebagai berikut:

Tabel 2.8
Nilai Cp untuk penurunan elastik

Jenis Tanah	Tiang Pancang	Tiang Bor
Pasir (padat – lepas)	0,02 – 0,04	0,09 – 0,18
Lempung (kaku – lunak)	0,02 – 0,03	0,03 – 0,06
Launau (padat – lepas)	0,03 – 0,05	0,09 – 0,12

Sumber: Vesic (1997)

Sedangkan untuk perhitungan penurunan (*settlement*) untuk tiang kelompok dengan mengunakan data uji SPT menurut Mayerhoff (1976) adalah sebagai berikut:

$$Sg = \frac{2q\sqrt{Bq.I}}{N} \quad (2\text{-}77)$$

$$I = (1 - \frac{L}{8Bg}) \quad (2\text{-}78)$$

$$q = \frac{Q}{B_g L_g} \quad (2\text{-}79)$$

Dengan:

Sg = penurunan pondasi tiang kelompok (cm)

I = faktor pengaruh

q = tekanan pada dasar pondasi (kg/cm^2)

B_g = lebar kelompok tiang (cm)

L_g = panjang kelompok tiang (cm)

L = panjang tiang tertanam (cm)

N = harga N-SPT pada kedalaman dibawah ujung pondasi tiang

2.7.3 Defleksi Tiang

Perhitungan defleksi tiang vertikal pada studi ini mengunakan metode Broms. Metode Broms digunakan untuk menghitung defleksi berupa tanah non kohesif atau granuler. Untuk tiang dalam tanah granuler, defleksi tiang akibat beban lateral dikaitkan dengan besaran tak berdimensi αL (Christiady, 2010, p.321), dengan:

$$\alpha = \left(\frac{n_h}{E_p I_p} \right)^{1/5} \quad (2\text{-}80)$$

Dengan:

n_h = koefisien variasi modulus (kN/m^3)

Ep = modulus elastisitas bahan tiang pancang (kN/m^2)

Ip = momen inersia tiang pancang (m^4)

= $\frac{\pi r^4}{4}$, untuk penampang berbentuk lingkaran

Tabel 2.9
Nilai-nilai n_h untuk tanah granuler (c=0)

Kerapatan Relatif (D_r)	Tak Padat	Sedang	Padat
Interval nilai A	100-300	300-1000	1000-2000
Nilai A dipakai	200	600	1500
n_h, pasir kering atau lembab (Terzaghi) (kN/m^2)	2425	7275	19400
n_h, pasir terendal air (kN/m^2)			
terzaghi	1386	4850	11779
Reese et al.	5300	16300	34000

Sumber: Christady (2010,p.315)

1. Tiang ujung bebas dan ujung jepit dianggap sebagai tiang pendek (kaku) bila αL < 2.
   a. Defleksi lateral tiang ujung bebas di permukaan tanah

$$y_0 = \frac{18H\left(1+1{,}33e/L\right)}{L^2 n_h} \tag{2-81}$$

   Rotasi tiang (θ)

$$\theta = \frac{24H\left(1+1{,}5e/L\right)}{L^3 n_h} \tag{2-82}$$

   b. Defleksi lateral tiang ujung jepit

$$y_0 = \frac{2H}{L^2 n_h} \tag{2-83}$$

2. Tiang ujung bebas dan ujung jepit dianggap sebagai tiang panjang (tidak kaku), bila αL>4
   a. Defleksi lateral tiang ujung bebas

$$y_0 = \frac{2{,}4H}{\left(n_h\right)^{3/5}\left(E_p I_p\right)^{2/5}} + \frac{1{,}6He}{\left(n_h\right)^{2/5}\left(E_p I_p\right)^{3/5}} \tag{2-84}$$

$$\theta = \frac{1{,}6H}{\left(n_h\right)^{2/5}\left(E_p I_p\right)^{3/5}} + \frac{1{,}74He}{\left(n_h\right)^{1/5}\left(E_p I_p\right)^{4/5}} \tag{2-85}$$

b. Defleksi lateral tiang ujung jepit

$$y_0 = \frac{0{,}93H}{(n_h)^{3/5}(E_p I_p)^{2/5}} \quad (2\text{-}86)$$

2.8 Software Geostudio

2.8.1 Gambaran Umum

Geostudio merupakan *Software* di bidang geoteknik yang dikembangkan oleh Prof. D. G. Fredlund di *University of* Saskatchewan dan diperkenalkan pertama kali sejak tahun 1977 di Kanada. Versi komersial pertamadipasang pada *mainframe* komputer dan pengunan dapat mengakses perangkat lunak memalui biro perangkat lunak, serta selanjutnya terus dikembangkan sehingga terakomodir dalam *Mcrosoft Windows* yang dalam pembahasan ini penulis mengunakan generasi Geostudio 2012 *for student*.

Dalam penelitian ini program Geostudi dugunakan untuk mengaalisa stabilitas lerang bangunan *seawall*. Dalam permodelan lereng pada program Geostrudio dibentuk berdasarkan 2 komponen yaitu titik dan *region*. Titik mewakili sebuah acuan untuk pembuatan geometri agar membentuk suatu bidang, sedangkan *region* merupakan bidang untuk mewakili suatu material lapisan tanah.

Gambar 2.25 Titik dan *region* pada *software* Geostudio
Sumber: Penulis

Dalam Geostudio 2012 terdiri atas beberapa sub aplikasi meliputi:

a. GeoSlope/W analysis, aplikasi geoteknik untuk permodelan stabilitas lereng.
b. GeoSeep/W analysis, aplikasi geoteknik untuk permodelan rembesan .
c. GeoSigma/W analysis, aplikasi geoteknik untuk permodelan tegangan dan deformasi lereng, tanah timbunan.
d. GeoQuaqe/W analysis, aplikasi geoteknik untuk permodelan gaya akibat gempa pada lereng, tanah timbunan, bendungan, dan sejenisnya.
e. GeoTemp/W analysis, GeoCtran/W analysis, GeoAir/W analysis danGeoVadose/W analysis.

2.8.2 GeoSlope/W

Geoslope merupakan salah satu komponen dari Geostudio yang lebih khusus dalam membahas tabiitas lereng. Prinsip dasar dari analisis Geoslope adalah mengacu pada "The Limits of Limit Equilibrium Analyses" (teori rancangan keseimbangan batas) yang berawal dari metode irisan yang dikembangkan oleh Fellenius (1936). Secara umum prinsip kerja software Geostudio meliputi *input* data, *solve* (proses pengolahan data) dan *output* (hasil) berupa grafik dan daftar variabel sepanjang pemukaan gelincir lereng atau tampilan gaya yang bekerja pada masing-masing bidang gelincir (*slice*).

Keseimbangan total gaya dalam dari tanah di bawah bidang longsor dan gaya dalam dari tanah di atas bidang longsor menentukan tingkat stabilitas dari suatu lereng. Analisa Geoslope dalam penelitian ini dipergunakan untuk mengetahui posisi bidang longsor paling kritis dari lereng bangunan, sehingga variabel yang menjadi input data adalah berat jenis (γ), kohesi (c), sudut geser dalam (θ) dan profil desai kemiringan lereng yang direncanakan. Hasil analisa akan memberikan banyak posisi bidang longsor yang mungkin terjadi dan *output* yang menjadi pilihan adalah bidang longsor paling kritis yang menunjukan nilai SF (*safety factor*) terkecil.

2.9 Geotektil

Geotekstil adalah struktur planar yang dihasilkan oleh jalinan dua atau lebih set elemen, seperti benang, serat, roving, atau filamen, di mana unsur-unsur melewati satu sama lain, biasanya anyaman dimulai dari sudut kanan, dan satu set elemen yang sejajar dengan kain sumbu. Geotekstil adalah kain permeabel yang, bila digunakan dalam hubungan dengan tanah, memiliki kemampuan untuk memisahkan, menyaring, memperkuat, melindungi, atau menguras. Biasanya terbuat dari polypropylene atau polyester, kain geotekstil datang dalam tiga bentuk dasar: anyaman, tekanan jarum (needle punched), atau terikat oleh panas (heat bonded).

Geotekstil banyak mendukung pembangunan teknik sipil seperti jalan, lapangan terbang, kereta api, tanggul, struktur penahan, waduk, kanal, bendungan, pelindung tebing, rekayasa pesisir pantai dan pagar untuk lokasi pembangunan bertanah lanau. Biasanya geotekstil dipakai untuk mendapatkan tegangan permukaan untuk memperkuat tanah. Geotekstil juga digunakan pada pelindung gundukan pasir untuk melindungi properti/material pesisir pantai dan dataran tinggi dari gelombang badai, ombak maupun banjir.

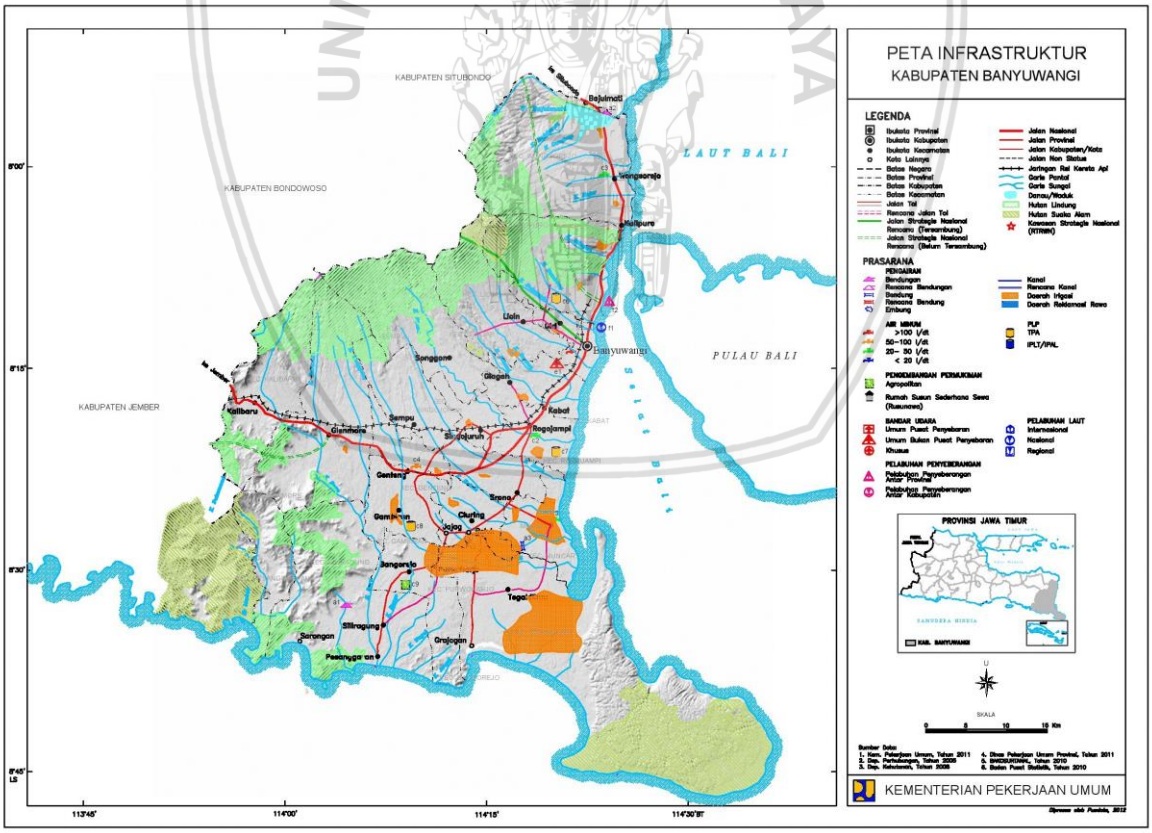
BAB III
METODOLOGI STUDI

3.1. Umum

Kabupaten Banyuwangi terletak pada posisi 113°53'-114°38' Bujur Timur dan diantara 7°43'-8°46' Lintang Selatan. Dengan panjang garis pantai sekitar 175,8 km. Luas Kabupaten Banyuwangi adalah 5.782,50 km². Wilayah Kabupaten Banyuwangi terbagi menjadi 24 Kecamatan, 28 Kelurahan, 189 Desa, 2.827 Rukun Warga (RW), dan 10.532 Rukun Tetangga (RT).

Adapun batas – batas wilayah Kabupaten Banyuwangi yaitu:

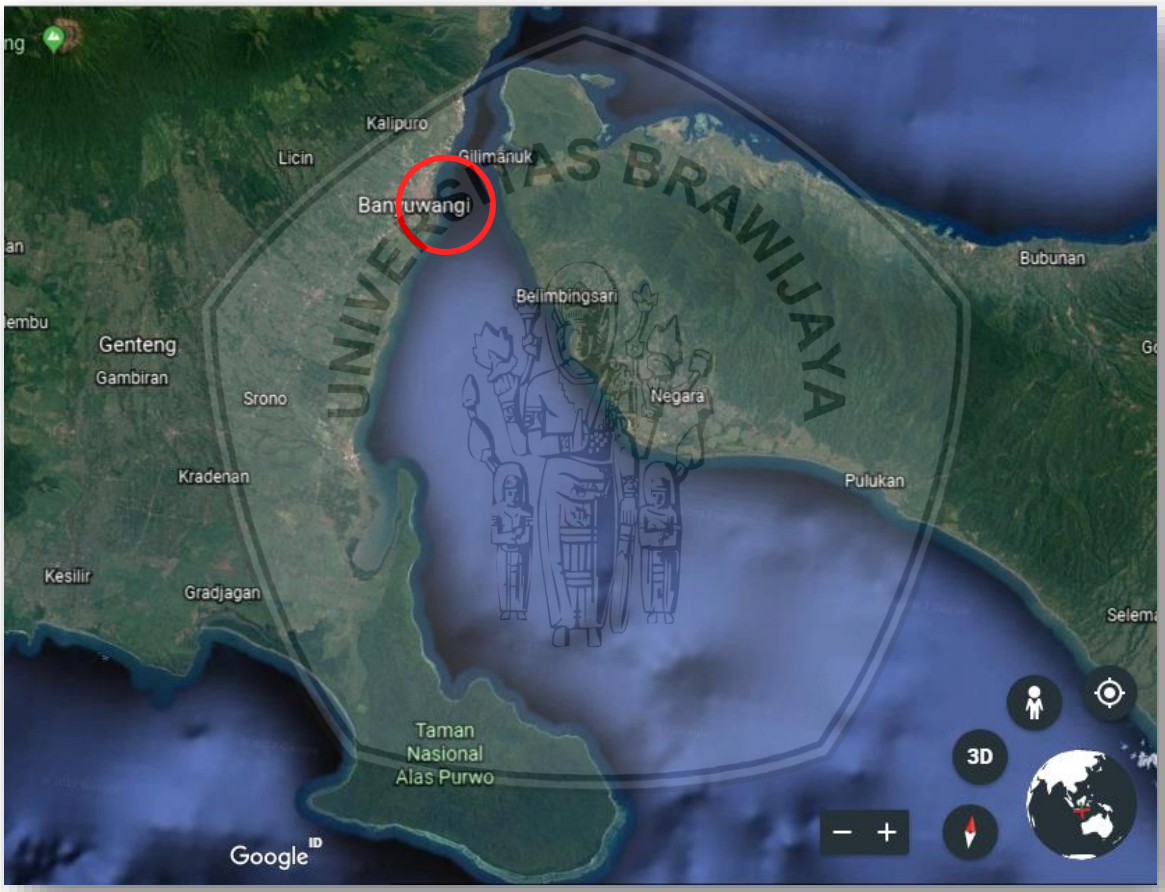
- Sebelah selatan : Samudra Indonesia
- Sebelah Utara : Kabupaten Situbondo
- Sebelah Barat : Kabupaten Jember dan Bodowoso
- Sebelah Timur : Selat Bali



Gambar 3.1 Peta Kabupaten Banyuwangi
Sumber: Kementerian Pekerjaan Umum, 2011

3.2. Lokasi Daerah Studi

Secara administrasi lokasi pekerjaan terletak di Kabupaten Banyuwangi tepatnya di Kecamatan Banyuwangi Kelurahan Kampung Mandar di Pesisir Pantai Boom yang wilayahnya langsung berhadapan dengan Selat Bali. Pantai Boom memiliki panjang kurang lebih 4 km. Sesuai dengan fungsinya pelabuhan marina ini akan dibangun 2 Tipe pelabuhan yaitu pelabuhan Tipe A dan Tipe D. Dimana pelabuhan Tipe A diperuntukkan sebagai pelabuhan kolam luxury dan Tipe D sebagai pelabuhan umum. Skripsi ini hanya membahas tentang studi perencanaan pelabuhan Tipe A.



Gambar 3.2 Pantai Boom
Sumber: Google Earth, 2017

Gambar 3.3 Lokasi Perencanaan Pantai Boom
Sumber: PT. Pelindo III, 2017

3.3. Data-data yang Diperlukan

Dalam penulisan tugas akhir ini diperlukan data-data yang mendukung guna memudahkan dalam menganalisa dari permasalahan yang ada. Data-data yang diperlukan dalam studi ini adalah sebagai berikut:

1. Peta daerah lokasi studi.

   Diperlukan untuk menentukan panjang daerah pembangkitan gelombang atau *fetch.*

2. Peta Bathymetri (peta laut) dan topografi daerah lokasi studi.

   Yaitu berupa data kontur dasar laut. Peta ini diperlukan untuk mengetahui keadaan kedalaman laut sekitar lokasi pekerjaan.

3. Data kecepatan dan arah angin.

   Data angin digunakan untuk memprediksi besarnya tinggi gelombang dan periode gelombang jika tidak ada data pengukuran di laut dalam yang terjadi di daerah studi. Data angin yang digunakan dalam studi ini diperoleh dari Badan Meteorologi Klimatologi dan Geofisika Kabupaten Banyuwangi untuk pengukuran tahun 2007 – 2017.

4. Data pengukuran pasang surut muka air laut.

   Data ini digunakan untuk mengetahui elevasi muka air laut tinggi, rata-rata, dan rendah. Data pasang surut yang digunakan dalam studi ini diperoleh dari Dinas Hidro-Oseanografi TNI Angkatan Laut tahun 2017.

5. Data mekanika tanah

   Data mekanika tanah yang digunakan dalam studi ini diperoleh dari PT. Pelabuhan Indonesia III (Persero) Cabang Tanjung Wangi yang diteliti di ITS.

3.4. Langkah-langkah Studi

Untuk mencapai tujuan yang diharapkan, maka disusun pola penyelesaian dalam bentuk langkah-langkah studi sebagai berikut:

1. Mengelola data angin.
2. Menganalisis panjang *fetch* efektif berdasarkan peta lokasi studi.
3. Pembangkitan gelombang oleh angin.

   Dari hasil olahan data angin dan panjang *fetch* efektif dapat dilakukan analisis pembangkitan gelombang sehingga diperoleh tinggi gelombang signifikan, periode gelombang signifikan, dan arah gelombang.

4. Analisa mawar gelombang (*wave rose*)

   Dengan cara mengelompokan tinggi gelombang berdasarkan arah angin yang ditinjau dan menggolongkannya dalam kelas-kelas yang berupa interval tinggi gelombang. Jumlah kejadian tinggi gelombang yang telah dikelompokan lalu dikoversikan dalam persentase yang dapat digambar sebagai mawar gelombang.

5. Analisa gelombang rencana.

   Menentukan tinggi gelombang dengan kala ulang tertentu yang akan dipakai dalam perencanaan bangunan *retaining wall*. Metode yang digunakan adalah metode Fisher Tippet tipe 1 dan distribusi Weibull. Pendekatan yang dilakukan dengan mencoba kedua metode tersebut dan kemudian dipilih yang memberikan hasil terbaik.

6. Analisa parameter-parameter gelombang.

   Dari tiap tinggi gelombang rencana dengan kala ulang tertentu didapat periode gelombang cepat rambat gelombang, dan panjang gelombang.

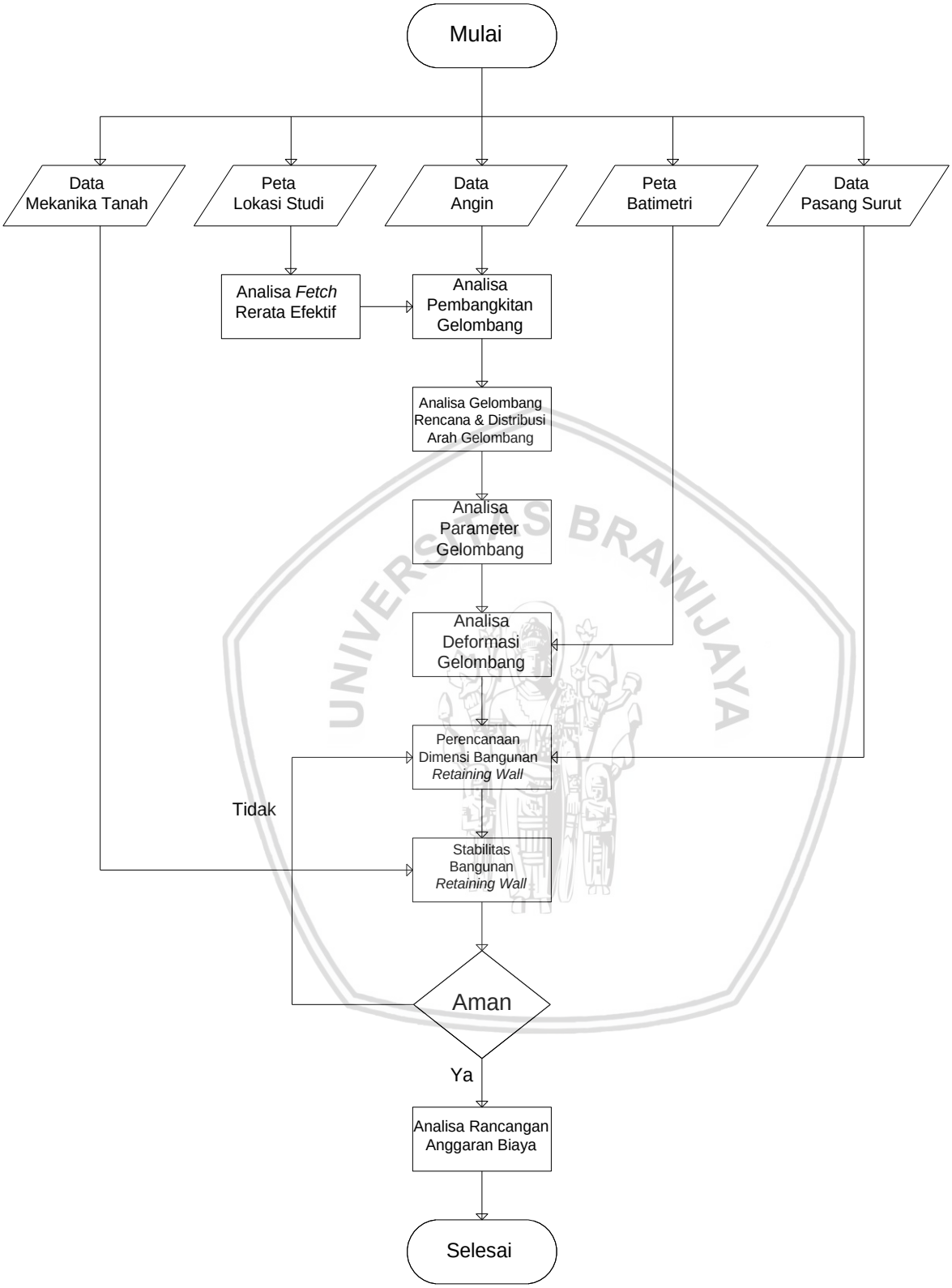
7. Menganalisi terjadinya deformasi gelombang.

   Yaitu refraksi, pendangkalan *(shoaling)*, dan gelombang pecah yang kemudian akan diperoleh nilai tinggi dan kedalam gelombang pecah.

8. Dilakukan perencanaan bangunan dinding penahan (*retainingwall)* yaitu menentukan dimensi bangunan.
9. Analisa stabilitas bangunan.

   Dengan dimensi bangunan yang ada dilakukan analisa stabilitas, apabila aman maka dapat dilanjutkan ke proses analisa pondasi bangunan dan daya dukung tanah, apabila tidak aman maka harus merubah dimensi bangunan sampai memenuhi nilai keamanan. Serta menganalisa daya dukung tanah terhadap bangunan.
10. Menghitung Rancangan Anggaran Biaya (RAB).
11. Selesai.

Untuk lebih jelasnya, langkah-langkah studi yang dilakukan tersebut dapat digambarkan dalam diagram alir pada Gambar 3.4



Gambar 3.4 Diagram alir penyelesaian skripsi
Sumber: Penulis

BAB IV
ANALISA DATA

4.1. Pembangkitan Gelombang

Dalam pembangkitan gelombang (peramalan gelombang) data yang digunakan adalah data angin. Karena kurangnya data gelombang di Indonesia, sedang pencatatan angin lebih mudah dan murah dan sudah banyak dilakukan di Indonesia. Pada studi ini akan dilakukan analisa gelombang dengan data angin maksimum dan data angin rerata.

4.1.1. Distribusi Arah Angin dan Tinggi Gelombang

Data yang diperlukan dalam analisa gelombang dari hasil pengukuran angin berupa kecepatan rata-rata, kecepatan maksimum, dan arah angin. Data angin yang tersedia terdiri dari data kecepatan rata-rata dan maksimum harian selama sebelas tahun. Selanjutnya dilakukan pemilihan data menurut besar dan arahnya untuk kemudian disajikan dalam bentuk *windrose*.

Berikut merupakan jumlah dan prosentase kejadian angin maksimum bulanan serta rata-rata bulanan disajikan dalam bentuk *windrose* sebagaimana pada Gambar 4.1 dan 4.3.

Tabel 4.1
Jumlah Kejadian Angin Maksimum Tahun 2007-2017

Arah	Kecepatan Angin (knot)					
	0-5	5,0-10,0	10,0-15,0	15,0-20	>20	Total
Utara	1185	175	2	1	2	1365
Timur Laut	193	54	2	0	0	249
Timur	171	11	0	0	0	182
Tenggara	793	33	1	0	0	827
Selatan	545	38	1	0	0	584
Barat Daya	192	9	0	0	0	201
Barat	103	2	0	0	0	105
Barat Laut	107	33	1	0	0	141
Data kosong			272			272
Total	3289	355	7	1	2	3926

Sumber: Hasil Perhitungan

Tabel 4.2
Prosentase Kejadian Angin Maksimum Tahun 2007-2017

Arah	Kecepatan Angin (knot)					
	0-5	5,0-10,0	10,0-15,0	15,0-20,0	>20,0	Total
Utara	30,18	4,46	0,05	0,03	0,05	34,77
Timur Laut	4,92	1,38	0,05	0,00	0,00	6,34
Timur	4,36	0,28	0,00	0,00	0,00	4,64
Tenggara	20,20	0,84	0,03	0,00	0,00	21,06
Selatan	13,88	0,97	0,03	0,00	0,00	14,88
Barat Daya	4,89	0,23	0,00	0,00	0,00	5,12
Barat	2,62	0,05	0,00	0,00	0,00	2,67
Barat Laut	2,73	0,84	0,03	0,00	0,00	3,59
Data kosong			6,93			6,93
Total	83,77	9,04	0,18	0,03	0,05	100,00

Sumber: Hasil Perhitungan

Tabel 4.3
Jumlah Kejadian Angin Rata-rata Tahun 2007-2017

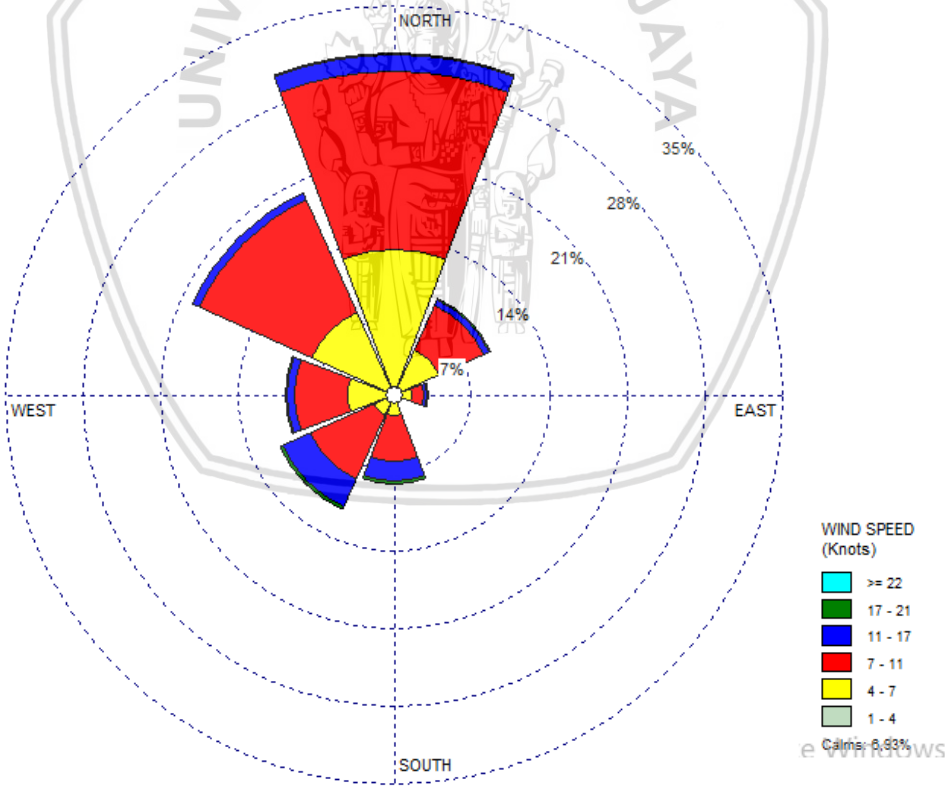
Arah	Kecepatan Angin (knot)					
	0-2,5	2,5-5,0	5,0-7,5	7,5-10	>10	Total
Utara	42	1143	140	35	5	1365
Timur Laut	9	184	38	16	2	249
Timur	9	162	10	1	0	182
Tenggara	15	778	23	10	1	827
Selatan	13	532	26	12	1	584
Barat Daya	5	187	9	0	0	201
Barat	1	102	1	1	0	105
Barat Laut	1	106	20	13	1	141
Data kosong			272			272
Total	95	3194	267	88	10	3926

Sumber: Hasil Perhitungan

Tabel 4.4
Prosentase Kejadian Angin Rata-rata Tahun 2007-2017

Arah	Kecepatan Angin (knot)					
	0-5	5,0-10,0	10,0-15,0	15,0-20,0	>20,0	Total
Utara	1,07	29,11	3,57	0,89	0,13	34,77
Timur Laut	0,23	4,69	0,97	0,41	0,05	6,34
Timur	0,23	4,13	0,25	0,03	0,00	4,64
Tenggara	0,38	19,82	0,59	0,25	0,03	21,06
Selatan	0,33	13,55	0,66	0,31	0,03	14,88
Barat Daya	0,13	4,76	0,23	0,00	0,00	5,12
Barat	0,03	2,60	0,03	0,03	0,00	2,67
Barat Laut	0,03	2,70	0,51	0,33	0,03	3,59
Data kosong			6,93			6,93
Total	2,42	81,36	6,80	2,24	0,25	100,00

Sumber: Hasil Perhitungan



Gambar 4.1 Mawar Angin (*windrose*) Maksimum Bulanan Tahun 2007-2017
Sumber: Hasil Perhitungan

4.1.2. Pembangkitan Gelombang Oleh Angin

Karena data angin yang dipakai adalah data angin yang tidak diukur langsung di atas permukaan air laut yaitu data diperoleh dari Badan Meteorologi dan Geofisika (BMKG) Maritim Kabupaten Banyuwangi maka perlu dilakukan koreksi lokasi, pengaruh suhu di darat dan di laut, serta terhadap faktor elevasi karena pengukuran dilakukan pada elevasi 2 m. Sebagai contoh akan dilakukan perhitungan data pada tanggal 1 bulan Januari 2007:

- Arah angin = S (Selatan)
- Kecepatan angin maksimum = 11 knot
- Ketinggian pengukuran = +2 m
- ΔT = 24°C - 26°C = -2°C

Data angin yang diperoleh memiliki satuan knot maka perlu dikonversi terlebih dahulu dalam satuan metrik (m/detik). Satu knot sama dengan 0.514 m/detik.

Uz = 11 x 0,514 = 5,659 m/detik

- Koreksi terhadap elevasi

  Karena pengukuran dilakukan pada ketinggian 2m maka perlu dilakukan koreksi dengan mengunakan persamaan (2-2)

$$U_{10} = U_z \left(\frac{10}{z}\right)^{1/7}$$

$$= 5{,}659 \left(\frac{10}{2}\right)^{1/7}$$

$$= 7{,}12 \text{ m/detik}$$

- Koreksi terhadap stabilitas dan lokasi

  Faktor koreksi akibat perbedaan temperatur di darat dan di laut yaitu R_T dapat dilihat pada Gambar 2.4 Sedangkan untuk faktor koreksi R_L dapat di lihat pada Gambar 2.3 dengan perhitungan sebagai berikut

R_T = 1,02 (gambar 2.4) dengan ΔT = -2°C

$R_L = 1{,}9746\ U_{10}^{-0{,}2442}$

$= 1{,}9746\ (7{,}12)^{-0{,}2442}$

$= 1{,}22$

Dengan persamaan (2-1) maka di dapat kecepatan angin koreksi

$Ut = R_T \cdot R_L \cdot (U_{10})$

$= 1{,}02 \cdot 1{,}22 \cdot 7{,}12$

$= 8{,}88$ m/detik

- Koreksi terhadap durasi

  Mencari waktu yang diperlukan untuk melintas dengan menggunaka Persamaan (2-4)

  $$t = \frac{1609}{U}$$

  $$t = \frac{1609}{8{,}88}$$

  $$= 181{,}17 \text{ detik}$$

  Jika t berada diantara 1-3600 detik maka mengunakan Persamaan (2-5) apabila t berada diantara 3600-36000 maka menggunakan Persamaan (2-6). Karena t berada diantara 1-3600 detik maka menggunakan Persamaan (2-5)

  $$\frac{U_t}{U_{3600}} = 1.277 + \tanh\left(0.9\log_{10}\frac{45}{t}\right)$$

  $$= 1.277 + \tanh\left(0.9\log_{10}\frac{45}{181{,}17}\right)$$

  $$= 1{,}34 \text{ m/detik}$$

  $$U_{t=3600} = \frac{U_t}{U_t/U_{3600}}$$

  $$= 8{,}88/1{,}34$$

  $$= 6{,}62 \text{ m/detik}$$

- Koreksi terhadap tegangan angin

  Kecepatan angin dikoreksi menjadi U_A sesuai dengan Persamaan (2-8)

  $$U_A = 0{,}71\, U^{1{,}23}$$

  $$= 0{,}71\, (6{,}62)^{1{,}23}$$

  $$= 7{,}26 \text{ m/dt}$$

Perhitungan bulan Januari tahun 2007 dapat dilihat pada Tabel 4.5.

Tabel 4.5

Perhitungan Angin terkoreksi Bulan Januari Tahun 2007

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	11	11	225	S	5,659	5,659	11,00	5,66	7,12	1,22	8,88	181,17	1,34	6,62	7,26
2	10	10	225	W	5,144	5,144	10,00	5,14	6,47	1,25	8,26	194,71	1,34	6,18	6,67
3	6	6	180	SW	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
4	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
5	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
6	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
7	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
8	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
9	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
10	8	8	180	SE	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
11	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
12	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
13	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
14	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
15	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
17	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
18	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
19	3	3	225	W	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
20	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
21	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
22	8	8	225	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
23	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
24	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
25	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
27	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
28	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
29	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
30	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
31	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58

Sumber: Hasil Perhitungan

Keterangan :

[1] Data
[2] Data
[3] Data
[4] Data
[5] Data
[6] Kec. Rata-rata = [2]*0,5144
[7] Kec. Maksimum = [3]*0,5144
[8] = [3]
[9] = [7]
[10] U10 = [9]*(10/2)^1/7
[11] Koef. Gambar 2.3.
[12] Ut = [10]*[11]*Koef. Gambar 2.4.
[13] t = 1609/[7]
[14] Ut/3600 = 1,277+tanh(0,9log10*45/[13], jika 1<t<3600
-0,15log10*[13]+1.5334, jika 3600<t<36000
[15] U = [12]/[14]
[16] Ua = 0,71*([15]^1,23)

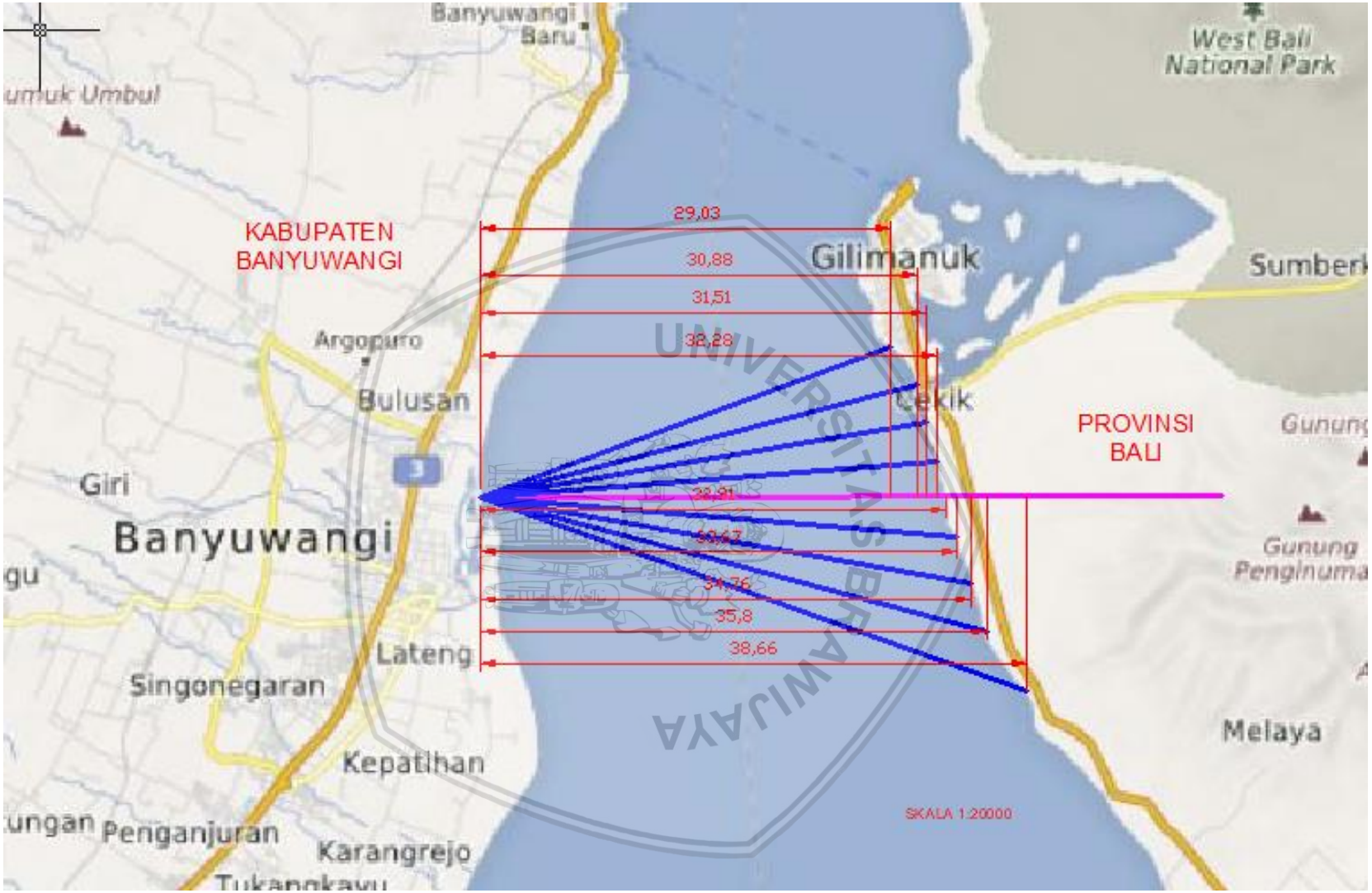
Perhitungan angin terkoreksi selanjutnya diberikan pada lampiran A.

Gelombang yang dibangkitkan oleh angin dipengaruhi oleh beberapa faktor yang meliputi kecepatan angin, lama hembusan angin, arah angin, dan *fetch*. Selanjutnya perhitungan *fetch* efaktif berdasarkan peta lokasi studi, panjang *fetch* efektif diukur dari titik pengamatan dengan inerval 5°, adapun yang meliputi wilayah pangaruh dalam pengukuran *fetch* adalah 20° searah jarum jam dan 20° berlawanan arah jarum jam. Berdasarkan hasil perhitungan, didapatkan *fetch* efektif untuk daerah Pantai Boom Kabupaten Banyuwangi dengan arah Timur Laut, Timur, Tenggara, dan Selatan. Dari hasil perhitungan *fetch* efektif didapat panjang *fetch* yang terbentuk untuk tiap arah mata angin yang diberikan pada Tabel 4.6.

Tabel 4.6
Rekapitulasi hasil perhitungan *fetch* efektif

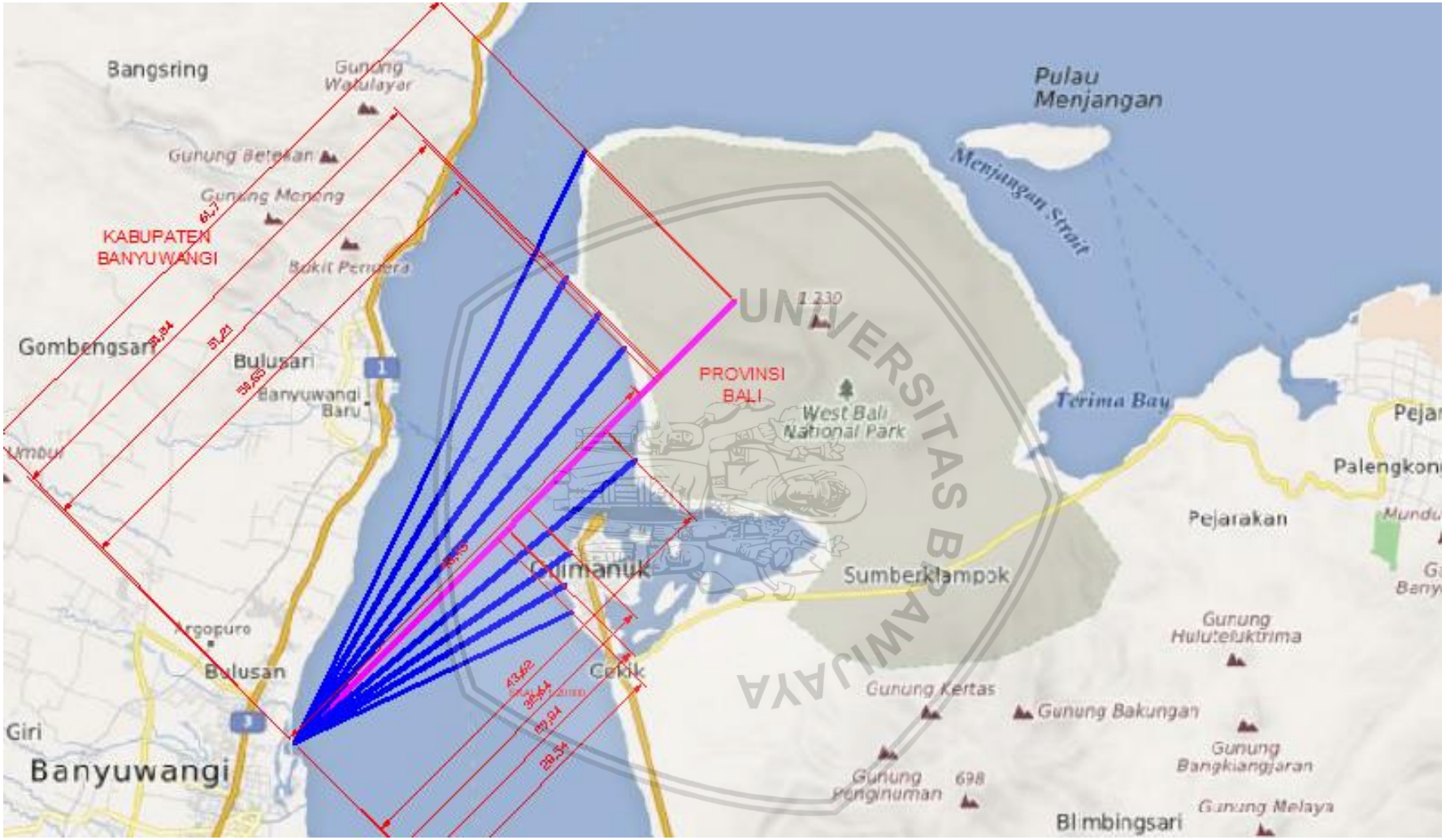
Arah	Fetch (km)
Timur Laut	8,852
Timur	6,654
Tenggara	8,422
Selatan	31,156

Sumber: Hasil Perhitungan



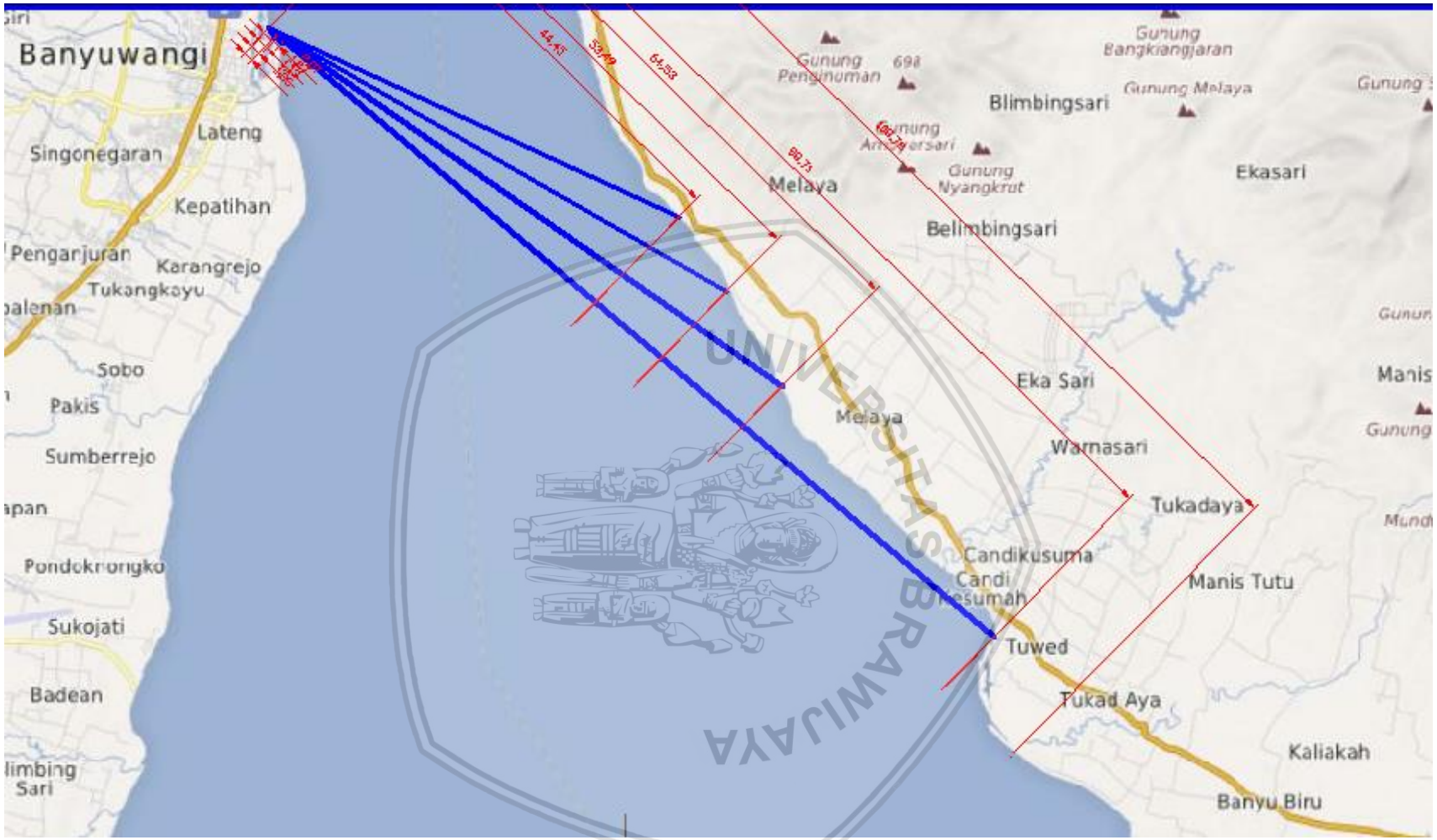
Gambar 4.2 *Fetch efektif* arah Timur

Sumber: Hasil Perhitungan



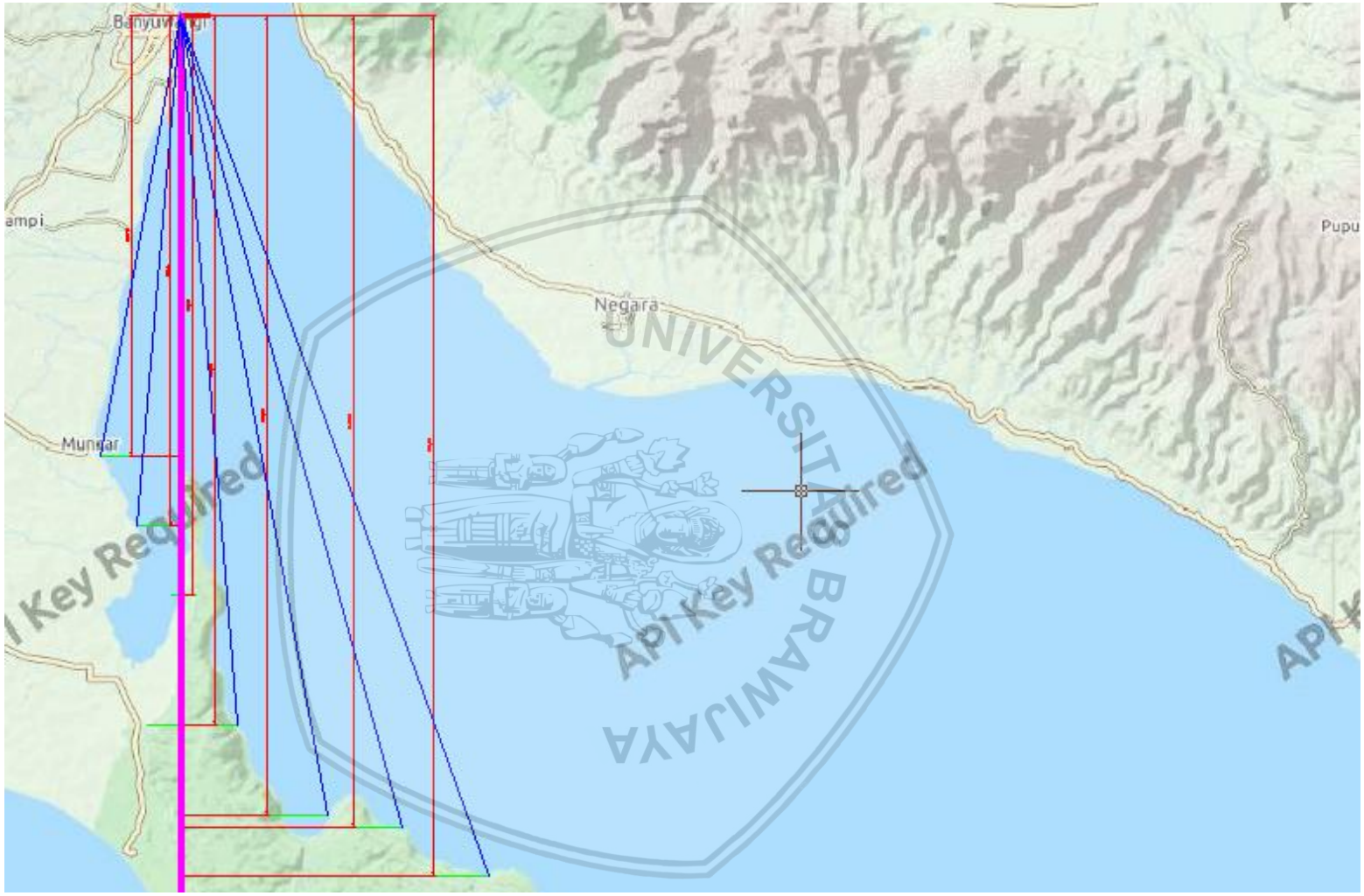
Gambar 4.3 *Fetch efektif* arah Timur Laut

Sumber: Hasil Perhitungan



Gambar 4.4 *Fetch efektif* arah Tenggara

Sumber: Hasil Perhitungan



Gambar 4.5 *Fetch efektif* arah Selatan

Sumber: Hasil Perhitungan

Tabel 4.7
Analisa *fetch* efektif

Arah	Sudut	Cos	Xi	Xi.Cos	Feff (km)
Timur	20	0,940	5,806	5,456	6,654
	15	0,966	6,176	5,966	
	10	0,985	6,302	6,206	
	5	0,996	6,456	6,431	
	0	1,000	6,582	6,582	
	5	0,996	6,734	6,708	
	10	0,985	6,952	6,846	
	15	0,966	7,160	6,916	
	20	0,940	7,732	7,266	
	Jumlah	8,773	Jumlah	58,378	
Timur Laut	20	0,940	12,340	11,596	8,852
	15	0,966	10,308	9,957	
	10	0,985	10,242	10,086	
	5	0,996	10,130	10,091	
	0	1,000	9,686	9,686	
	5	0,996	8,724	8,691	
	10	0,985	6,528	6,429	
	15	0,966	5,968	5,765	
	20	0,940	5,708	5,364	
	Jumlah	8,773	Jumlah	77,664	
Tenggara	20	0,940	8,89	8,354	8,422
	15	0,966	10,698	10,333	
	10	0,985	12,906	12,710	
	5	0,996	19,742	19,667	
	0	1,000	21,744	21,744	
	5	0,996	0,414	0,412	
	10	0,985	0,254	0,250	
	15	0,966	0,226	0,218	
	20	0,940	0,212	0,199	
	Jumlah	8,773	Jumlah	73,888	
Selatan	20	0,940	50,992	47,917	31,156
	15	0,966	48,156	46,515	
	10	0,985	47,452	46,731	
	5	0,996	42,056	41,896	
	0	1,000	34,370	34,370	
	5	0,996	30,28	30,165	
	10	0,985	26,144	25,747	
	15	0,966	0	0,000	
	20	0,940	0,000	0,000	
	Jumlah	8,773	Jumlah	273,341	

Sumber: Hasil Perhitungan

Dalam studi ini, pembentukan gelombang diperairan dalam dianalisa dengan formula spektrum JONSWAP. Prosedur ini berlaku untuk kondisi gelombang tidak terbentuk penuh (*non fully developed sea*), baik untuk kondisi *fetch* terbatas (*fetch limited*) maupun durasi terbatas (*duration limited*) serta gelombang terbentuk penuh (*fully developed sea*) seperti pada Persamaan (2-10) sampai (2-15). Untuk perhitungan pembangkitan gelombang oleh angin pada bulan Januari tahun 2007 disajikan pada Tabel 4.8 berikut.

Tabel 4.8 Perhitungan pembangkitan gelombang oleh angin bulan Januari tahun 2007

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	6,62	7,26	31156,166	21600	22222,968	Non Fully Developed Sea	16437,3	Fetch Limited	0,6543	3,798	16437,26	4,566	-	-	-	-	22,532	34,439	***swell***	Non Fully Developed Sea	0,6543	3,798
2	W	6,18	6,67	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	4,26	4,22	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	***swell***	Non Fully Developed Sea	0,4927	3,455
5	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	***swell***	Non Fully Developed Sea	0,4927	3,455
6	S	3,16	2,93	31156,166	21600	74622,342	Fully Developed Sea	-	-	-	-	-	-	0,212	2,425	########	5,922	9,189	43,302	***swell***	Fully Developed Sea	0,2122	2,425
7	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	***swell***	Fully Developed Sea	0,1257	1,867
8	E	3,73	3,58	6654,051	21600	20361,602	Non Fully Developed Sea	7431,95	Fetch Limited	0,1492	1,794	7431,95	2,064	-	-	-	-	5,027	33,694	***swell***	Non Fully Developed Sea	0,1492	1,794
9	SE	4,26	4,22	8421,998	21600	19131,565	Non Fully Developed Sea	8231,94	Fetch Limited	0,1979	2,050	8231,94	2,287	-	-	-	-	6,564	33,173	***swell***	Non Fully Developed Sea	0,1979	2,05
10	SE	5,26	5,46	8421,998	21600	13558,812	Non Fully Developed Sea	7553,01	Fetch Limited	0,2562	2,234	7553,01	2,098	-	-	-	-	7,798	30,437	***swell***	Non Fully Developed Sea	0,2562	2,234
11	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
12	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	***swell***	Fully Developed Sea	0,1257	1,867
13	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	***swell***	Non Fully Developed Sea	0,3806	3,17
14	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	***swell***	Non Fully Developed Sea	0,4927	3,455
15	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
16	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	***swell***	Non Fully Developed Sea	0,1371	1,814
17	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	***swell***	Fully Developed Sea	0,1257	1,867
18	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
19	W	2,56	2,25	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	***swell***	Non Fully Developed Sea	0,1371	1,814
21	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	***swell***	Fully Developed Sea	0,1257	1,867
22	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	***swell***	Non Fully Developed Sea	0,4927	3,455
23	SW	2,56	2,25	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	***swell***	Non Fully Developed Sea	0,3806	3,17
25	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
26	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	***swell***	Non Fully Developed Sea	0,1371	1,814
27	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
28	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
29	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	***swell***	Non Fully Developed Sea	0,3806	3,17
30	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001
31	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	***swell***	Non Fully Developed Sea	0,3229	3,001

Sumber: Hasil Perhitungan

Ketarangan:

[1] Tanggal

[2] Data arah angin.

[3] Data kecepatan angin U_{10} yang di dapat dari perhitungan sebelumnya.

[4] $U_A = 0{,}71*[3]^{1.23}$

[5] Panjang *fetch* efektif yang didapat dari perhitungan sebelumnya.

[6] Karena dari data historis penelitian durasi hembusan angin di Indonesia rerata 4-6 jam, sehingga di ambil durasi unutuk pembangkitan gelombag di Pantai Boom sebesar 6 jam atau 21600 detik.

[7] Cek *Fully*/*Non Fully Developed Sea* dengan mengunakan Persamaan (2-10)

$$\text{Cek} = 68{,}8.\left(\frac{gF}{U_A^{\,2}}\right)^{2/3} = 68{,}8\ .\left(\frac{g\,[5]}{[4]^2}\right)^{2/3}$$

[8] Jika nilai yang didapatkan pada perhitungan [7] ≤ 7,15 x 10^4 maka tergolong *Non Fully Developed Sea*, sendangkan jika nilai dari [7] > 7,15 x 10^4 maka tergolong *Fully Developed Sea*

[9] Perhitungan durasi t_c dari kondisi gelombang *Non Fully Developed Sea*.

$$t_c = 68{,}8.\left(\frac{gF}{U_A^{\,2}}\right)^{2/3}.\frac{U_A}{g} = 68{,}8\ .\left(\frac{g\,[5]}{[4]^2}\right)^{2/3}.\frac{[4]}{g}$$

[10] Jika nilai t_c yang didapatkan ≤ [7] maka tergolong *fetch limited*, sedangkan jika nilai t_c > [7] maka digolongkan *Duration Limited*.

[11] Menghitung tinggi gelombang signifikan pada kondisi *Non Fully Developed Sea*

$$H_{m0} = 0{,}0016\,\frac{U_A^{\,2}}{g}\left(\frac{gF}{U_A^{\,2}}\right)^{1/2} \quad H_s = 0{,}0016\ .\frac{[4]^2}{g}\left(\frac{g[5]}{[4]}\right)^{1/2}$$

[12] Menghitung periode puncak signifikan pada kondisi *Non Fully Developed Sea*

$$T_p = 0{,}2857\,\frac{U_A}{g}\left(\frac{gF}{U_A^{\,2}}\right)^{1/3} \quad T_p = 0{,}2857\ .\frac{[4]}{g}\left(\frac{g[5]}{[4]}\right)^{1/3}$$

[13] Menghitung durasi angin signifikan pada kondisi *Non Fully Developed Sea*

$$t_c = 68{,}8.\left(\frac{gF}{U_A^{\,2}}\right)^{2/3}.\frac{U_A}{g} = 68{,}8\ .\left(\frac{g\,[5]}{[4]^2}\right)^{2/3}.\frac{[4]}{g}$$

[14] Mengkonversi detik ke jam [13]/3600

[15] Menghitung periode puncak signifikan pada kondisi *Fully Developed Sea*

$$H_{m0} = 0{,}2433 \frac{U_A^{\,2}}{g} \text{ , } H_s = 0{,}2433 \,.\, \frac{[4]^2}{9.81}$$

[16] Menghitung periode puncak signifikan pada kondisi *Fully Developed Sea*

$$T_p = 8{,}134 \frac{U_A}{g} \text{ , } T_p = 8{,}134 \,.\, \frac{[4]}{9.81}$$

[17] Menghitung durasi angin signifikan pada kondisi *Fully Developed Sea*

$$t_c = 7{,}15 \text{ x } 10^4 \,.\, \frac{[5]}{g}$$

[18] Mengkonversi detik ke jam [17]/3600

[19] Menghitung panjang gelombang

$$L_0 = \frac{g([12] atau\ [14])^2}{2\pi}$$

[20] [19] / [12] atau [14], tergantung *Non Fully Developed Sea* atau *Fully Developed Sea*

[21] Menentukan jenis gelombang, apabila [19] > 20 maka *swell* jika [19] < 20 maka *sea*.

[22] Rekapitulasi tipe kondisi gelombang.

[23] Rekapitulasi tinggi gelombang signifikan.

[24] Rekapitulasi periode puncak signifikan.

Perhitungan pembentukan gelombang oleh angin selanjutnya diberikan pada Lampiran B.

Tabel 4.9
Data tinggi gelombang signifikan tahunan arah Selatan

TAHUN	H33% (m)	T33% (detik)
2007	0,666	3,372
2008	0,427	3,092
2009	0,587	3,292
2010	0,446	3,341
2011	0,430	3,297
2012	0,540	3,556
2013	0,365	3,126
2014	0,397	3,119
2015	0,397	3,068
2016	0,298	1,259
2017	0,365	3,075

Sumber: Hasil Perhitungan

Tabel 4.10
Data tinggi gelombang signifikan tahunan arah timur

TAHUN	H33% (m)	T33% (detik)
2007	0,183	1,918
2008	0,179	1,865
2009	0,148	1,778
2010	0,208	1,958
2011	0,189	1,921
2012	0,208	1,971
2013	0,138	1,591
2014	0,199	0,493
2015	0,000	0,000
2016	0,169	0,467
2017	0,169	0,467

Sumber: Hasil Perhitungan

Tabel 4.11
Data tinggi gelombang signifikan arah timur laut

TAHUN	H33% (m)	T33% (detik)
2007	0,212	2,017
2008	0,245	2,066
2009	0,217	2,110
2010	0,329	2,403
2011	0,340	2,444
2012	0,209	2,338
2013	0,000	0,000
2014	0,263	1,654
2015	0,296	0,591
2016	0,361	2,421
2017	0,194	0,954

Sumber: Hasil Perhitungan

Tabel 4.12
Data tinggi gelombang signifikan tahunan arah tenggara

TAHUN	H33% (m)	T33% (detik)
2007	0,273	2,279
2008	0,305	2,359
2009	0,311	2,368
2010	0,273	2,276
2011	0,215	2,107
2012	0,223	2,132
2013	0,172	1,923
2014	0,190	1,516
2015	0,190	1,916
2016	0,190	0,978
2017	0,000	0,000

Sumber: Hasil Perhitungan

4.1.3. Distrbusi Arah dan Tinggi Gelombang Signifikan

Dari analisa pembangkitan gelombang didapat tinggi gelombang signifikan. Dalam Tabel 4.13 disajikan distribusi tinggi dan arah gelombang dan dalam Tabel 4.14 disajikan prosentase distribusi tinggi dan arah gelombang.

Tabel 4.13
Distribusi tinggi dan arah gelombang Tahun 2007-2017

Arah	**Tinggi (m)**					
	0-0,5	**0,5-1,0**	**1,0-1,5**	**1,5-2,0**	**>2,0**	**Total**
Utara	0	0	0	0	0	0
Timur Laut	249	0	0	0	0	249
Timur	180	0	0	0	0	180
Tenggara	825	0	0	0	0	825
Selatan	0	0	0	0	0	0
Barat Daya	0	0	0	0	0	0
Barat	0	0	0	0	0	0
Barat Laut	0	0	0	0	0	0
Total	1254	0	0	0	0	1254

Sumber: Hasil Perhitungan

Tabel 4.14
Prosentase distribusi tinggi dan arah gelombang Tahun 2007-2017

Arah	Tinggi (m)					
	0-0,5	**0,5-1,0**	**1,0-1,5**	**1,5-2,0**	**>2,0**	**Total**
Utara	0,00	0,00	0,00	0,00	0,00	0,00
Timur Laut	19,86	0,00	0,00	0,00	0,00	19,86
Timur	14,35	0,00	0,00	0,00	0,00	14,35
Tenggara	65,79	0,00	0,00	0,00	0,00	65,79
Selatan	0,00	0,00	0,00	0,00	0,00	0,00
Barat Daya	0,00	0,00	0,00	0,00	0,00	0,00
Barat	0,00	0,00	0,00	0,00	0,00	0,00
Barat Laut	0,00	0,00	0,00	0,00	0,00	0,00
Total	100,00	0,00	0,00	0,00	0,00	100,00

Sumber: Hasil Perhitungan

4.2 Analisis Gelombang Rencana

Untuk keperluan perencanaan bangunan pantai maka harus dipilih tinggi gelombang yang cukup memadai untuk tujuan tertentu yang telah ditetapkan. Maka dalam penentuan tinggi gelombang yang digunakan dalam desain, dipakai analisis frekuensi dengan kala ulang yang telah ditentukan. Dalam memprediksi gelombang dengan periode ulang tertentu, digunakan dua metode distribusi yaitu distribusi Gumbel (Fisher-Tippet Tipe I) dan distribusi Weibull. Pendekatan yang dilakukan adalah mencoba dua metode tersebut untuk data yang tersedia dan kemudian dipilih yang memberikan hasil terbaik.

Tahapan perhitungan yang dilakukan adalah sebagai berikut:

1. Dari hasil pembangkitan gelombang dari Januari 2007 – September 2017 dipilih tinggi gelombang signifikan maksimum tahunan tiap arah mata angin sesuai *Fetch*, sehingga didapat tinggi gelombang maksimum tahunan sebanyak 11 tahun.
2. Untuk analisis Fisher-Tippet I dan Weibull data diurutkan dari tinggi gelombang terbesar hingga terkecil.
3. Mencari probabilitas ditetapkan untuk setiap tinggi gelombang.
4. Parameter A dan B yang dihitung dari metode kuadrat terkecil untuk setiap tipe distribusi yang digunakan.
5. Menghitung tinggi gelombang signifikan (H_{33}) untuk berbagai periode ulang.
6. Perkiraan interval keyakinan.

Tabel 4.15
Data tinggi gelombang signifikan tahunan arah Selatan

Tahun	Selatan Hm0 (m)	Ts (detik)
2007	0,66612	3,3717
2008	0,42718	3,0916
2009	0,58681	3,2922
2010	0,44585	3,3408
2011	0,42959	3,2968
2012	0,53992	3,5556
2013	0,36488	3,1262
2014	0,39741	3,1193
2015	0,39741	3,0685
2016	0,29824	1,2587
2017	0,36488	3,0754

Sumber: Hasil Perhitungan

Tabel 4.16
Data tinggi gelombang signifikan tahunan dari yang besar ke kecil

Tahun	Selatan Hm0 (m)	Ts (detik)
2007	0,666	3,372
2009	0,587	3,292
2012	0,540	3,556
2010	0,446	3,341
2011	0,430	3,297
2008	0,427	3,092
2014	0,397	3,119
2015	0,397	3,068
2013	0,365	3,126
2017	0,365	3,075
2016	0,298	1,259

Sumber: Hasil Perhitungan

Tabel 4.17
Perhitungan gelombang metode Fisher-Tippet I dengan data tinggi gelombang signifikan tahunan arah Selatan

No.	Tahun	Hs_m	P	y_m	$Hs_m y_m$	y_m^2	$(Hs_m - Hr)^2$	$\hat{H}s_m$	$Hs_m - \hat{H}s_m$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2007	0,666	0,950	2,963	1,974	8,778	0,048	0,664	0,003
2	2009	0,587	0,860	1,889	1,109	3,570	0,020	0,568	0,019
3	2012	0,540	0,770	1,341	0,724	1,798	0,009	0,518	0,021
4	2010	0,446	0,680	0,952	0,425	0,907	0,000	0,484	-0,038
5	2011	0,430	0,590	0,639	0,275	0,408	0,000	0,456	-0,026
6	2008	0,427	0,500	0,367	0,157	0,134	0,000	0,431	-0,004
7	2014	0,397	0,410	0,115	0,046	0,013	0,002	0,409	-0,011
8	2015	0,397	0,320	-0,130	-0,052	0,017	0,002	0,387	0,011
9	2013	0,365	0,230	-0,384	-0,140	0,148	0,007	0,364	0,001
10	2017	0,365	0,140	-0,675	-0,246	0,456	0,007	0,338	0,027
11	2016	0,298	0,050	-1,095	-0,327	1,199	0,022	0,301	-0,002
Jumlah		4,918	5,500	5,982	3,943	17,428	0,117		
Rerata		0,447		0,544					

Sumber: Hasil Perhitungan

Keterangan:

[1] Nomor urut data ke-m

[2] Tahun data ke-m

[3] Hs_m = data tinggi gelombang signifikan ke-m

[4] Probabilitas untuk distribusi Fisher-Tipper I

$$P(H_s \le H_{sm}) = 1 - \frac{m - 0{,}44}{N_T + 0{,}12} \rightarrow P(H_s \le H_{sm}) = 1 - \frac{[1] - 0{,}44}{11 + 0{,}12}$$

[5] $y_m = -\ln\{-\ln P(H_S \le H_{sm})\} \rightarrow y_m = -\ln\{-\ln[4]\}$

[6] $Hs_m y_m \rightarrow$ [3]*[5]

[7] $y_m^2 \rightarrow [5]^2$

[8] $(Hs_m - Hr)^2 \rightarrow ([3] - Hr)^2$

Hr = rerata [3]

[9] $\hat{H}s_m = Ay_m + B$

$$A = \frac{n\sum Hs_m y_m - \sum Hs_m \sum y_m}{n\sum y_m{}^2 - \left(\sum y_m\right)^2}$$

$$B = Hr - Ay_{m\,rerata}$$

[10] [3] –[9]

Tabel 4.18
Perhitungan gelombang periode tertentu metode Fisher-Tippet I

Kala Ulang	y_r	Hs_r	σ_{nr}	σ_r	$Hs-1{,}28\sigma_r$	$Hs+1{,}28\sigma_r$
(tahun)	(tahun)	(m)			(m)	(m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2	0,367	0,431	0,320	0,035	0,387	0,476
5	1,500	0,533	0,535	0,058	0,459	0,607
10	2,250	0,600	0,728	0,079	0,499	0,701
25	3,199	0,685	0,989	0,107	0,548	0,822
50	3,902	0,748	1,188	0,129	0,583	0,912
100	4,600	0,810	1,387	0,150	0,618	1,003

Sumber: Hasil Perhitungan

Keterangaan:

[1] Periode Ulang

[2] $y_r = -\ln\left\{-\ln\left(1-\frac{1}{LT_r}\right)\right\} \rightarrow y_r = -\ln\left\{-\ln\left(1-\frac{1}{1(1)}\right)\right\}$

[3] A x [2] + B

[4] $\sigma_{nr} = \frac{1}{\sqrt{N}}\left[1+\alpha\left(y_r - c + \varepsilon \ln v\right)^2\right]^{1/2}$

[5] σHs x [4]

$$\sigma H_s = \left[\frac{1}{N-1}\sum_{i=1}^{N}\left(Hs_m - Hr\right)^2\right]^{1/2}$$

[6] [3] – 1,28[5]

[7] [3] +1,28 [5]

Selanjutnya adalah perhitungan menggunakan metode Weibull dengan nilai k=1

Tabel 4.19
Perhitungan gelombang metode Weibull dengan data tinggi gelombang signifikan arah Selatan

No.	Tahun	Hs_m	P	y_m	$Hs_m y_m$	y_m^2	$(Hs_m - Hr)^2$	$\hat{H}s_m$	$Hs_m - \hat{H}s_m$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2007	0,666	0,954	3,071	2,046	9,432	0,048	0,690	-0,024
2	2009	0,587	0,866	2,011	1,180	4,044	0,020	0,566	0,021
3	2012	0,540	0,779	1,508	0,814	2,274	0,009	0,507	0,033
4	2010	0,446	0,691	1,175	0,524	1,380	0,000	0,468	-0,022
5	2011	0,430	0,604	0,926	0,398	0,857	0,000	0,439	-0,009
6	2008	0,427	0,516	0,726	0,310	0,527	0,000	0,416	0,012
7	2014	0,397	0,429	0,560	0,222	0,313	0,002	0,396	0,001
8	2015	0,397	0,341	0,417	0,166	0,174	0,002	0,380	0,018
9	2013	0,365	0,254	0,293	0,107	0,086	0,007	0,365	0,000
10	2017	0,365	0,166	0,182	0,066	0,033	0,007	0,352	0,013
11	2016	0,298	0,079	0,082	0,024	0,007	0,022	0,340	-0,042
Jumlah		4,918	5,678	10,950	5,858	19,127	0,117		
Rerata		0,447		0,995					

Sumber: Hasil Perhitungan

Keterangan:

[1] Nomor urut data ke-m

[2] Tahun data ke-m

[3] Hs_m = data tinggi gelombang signifikan ke-m

[4] P = probabilitas untuk Weibull

$$P(H_S \le H_{sm}) = 1 - \frac{m - 0{,}2 - \frac{0{,}27}{\sqrt{\kappa}}}{N_T + 0{,}2 + \frac{0{,}23}{\sqrt{\kappa}}} \rightarrow = 1 - \frac{[1] - 0{,}2 - \frac{0{,}27}{\sqrt{1}}}{11 + 0{,}2 + \frac{0{,}23}{\sqrt{1}}}$$

[5] $y_m = [-\ln\{1 - P(H_S \le H_{sm})\}]^{1/\kappa} \rightarrow y_m = [-\ln\{1 - [4]\}]^{1/1}$

[6] $Hs_m y_m$ → [3]*[5]

[7] y_m^2 → $[5]^2$

[8] $(Hs_m - Hr)^2$ → $([3] - Hr)^2$

Hr = rerata [3]

[9] $\hat{H}s_m = Ay_m + B$

$$A = \frac{n\sum Hs_m y_m - \sum Hs_m \sum y_m}{n\sum y_m{}^2 - \left(\sum y_m\right)^2}$$

$$B = Hr - Ay_{m\,rerata}$$

[10] [3] – [9]

Tabel 4.20
Perhitungan gelombang periode tertentu metode Weibull

Kala Ulang (tahun)	y_r (tahun)	Hs_r (m)	σ_{nr}	σ_r	Hs-1,28σ_r (m)	Hs+1,28σ_r (m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2	0,693	0,412	0,368	0,040	0,361	0,463
5	1,609	0,519	0,766	0,083	0,413	0,625
10	2,303	0,600	1,118	0,121	0,445	0,755
25	3,219	0,707	1,598	0,173	0,485	0,929
50	3,912	0,788	1,966	0,213	0,515	1,061
100	4,605	0,869	2,335	0,253	0,545	1,193

Sumber: Hasil Perhitungan

Keterangan:

[1] Periode ulang

[2] $y_r = \{\ln(LT_r)\}^{1/\kappa} \rightarrow y_r = \{\ln(1[1])\}^{1/1}$

[3] A x [2] + B

[4] $\sigma_{nr} = \frac{1}{\sqrt{N}}\left[1 + \alpha\left(y_r - c + \varepsilon \ln v\right)^2\right]^{1/2}$

[5] σH_s x (4)

$$\sigma H_s = \left[\frac{1}{N-1}\sum_{i=1}^{N}\left(Hs_m - Hr\right)^2\right]^{1/2}$$

[6] [3] – 1,28[5]

[7] [3] + 1,28[5]

Selanjutnya akan dilakukan pemilihan distribusi yang mendekati tinggi gelombang signifikan data dengan menggunakan dua model distribusi tersebut. Metode pemilihannya adalah dengan menentukan Kesalahan Absolut Rerata (KAR) dari masing-masing model distribusi. Nilai KAR ini didapatkan dengan membandingkan tinggi gelombang hasil distribusi dengan tinggi gelombang data.

Tabel 4.21
Perhitungan persentase Kesalahan Absolut Rerata

No	Tahun	Hs_m	$\hat{H}s_m$ FT-1	$\hat{H}s_m$ Weibull	KA FT-1 (%)	KA Weibull (%)
[1]	[2]	[3]	[4]	[5]	[6]	[7]
1	2007	0,666	0,664	0,690	0,382	3,541
2	2009	0,587	0,568	0,566	3,287	3,580
3	2012	0,540	0,518	0,507	3,979	6,093
4	2010	0,446	0,484	0,468	8,481	4,988
5	2011	0,430	0,456	0,439	6,066	2,176
6	2008	0,427	0,431	0,416	0,956	2,703
7	2014	0,397	0,409	0,396	2,853	0,303
8	2015	0,397	0,387	0,380	2,665	4,494
9	2013	0,365	0,364	0,365	0,224	0,025
10	2017	0,365	0,338	0,352	7,351	3,526
11	2016	0,298	0,301	0,340	0,000	0,000
Kesalahan Absolut Rerata (%)					3,295	2,857

Sumber: Hasil Perhitungan

Keterangan:

[1] Nomor Urut

[2] Data

[3] Data

[4] Data

[5] Data

[6] {ABS([3]-[4]) / [3]} x 100%

[7] {ABS([3]-[4]) / [3]} x 100%

Dari Tabel 4.21. diatas dapat disimpulkan bahwa distribusi yang paling mendekati gelombang signifikan adalah distribusi Weibull dengan persentase Kesalahan Absolut Rerata (KAR) 2,857 %. Berdasarkan hasil tersebut, metode distribusi yang digunakan untuk analisis gelombang rencana di pantai Boom adalah distribusi Weibull.

Berikut ini akan disajikan perhitungan tinggi gelombang dari tiap arah angin menggunakan metode distribusi Weibull.

Tabel 4.22
Perhitungan gelombang arah Timur dengan metode Weibull

No.	Tahun	Hs_m	P	y_m	$Hs_m y_m$	y_m^2	$(Hs_m - Hr)^2$	$\hat{H}s_m$	$Hs_m - \hat{H}s_m$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2012	0,208	0,954	3,071	0,640	9,432	0,002	0,246	-0,038
2	2010	0,208	0,866	2,011	0,417	4,044	0,002	0,203	0,004
3	2014	0,199	0,779	1,508	0,300	2,274	0,001	0,183	0,015
4	2011	0,189	0,691	1,175	0,222	1,380	0,001	0,170	0,019
5	2007	0,183	0,604	0,926	0,170	0,857	0,000	0,160	0,024
6	2008	0,179	0,516	0,726	0,130	0,527	0,000	0,152	0,027
7	2016	0,169	0,429	0,560	0,094	0,313	0,000	0,145	0,024
8	2017	0,169	0,341	0,417	0,070	0,174	0,000	0,139	0,029
9	2009	0,148	0,254	0,293	0,043	0,086	0,000	0,134	0,014
10	2013	0,138	0,166	0,182	0,025	0,033	0,001	0,130	0,008
11	2015	0,000	0,079	0,082	0,000	0,007	0,026	0,126	-0,126
Jumlah		1,789	5,678	10,950	2,112	19,127	0,034		
Rerata		0,163		0,995					

Sumber: Hasil Perhitungan

Tabel 4.23
Perhitungan gelombang arah Timur periode tertentu metode Weibull

Kala Ulang (tahun)	y_r (tahun)	Hs_r (m)	σ_{nr}	σ_r	$Hs-1{,}28\sigma_r$ (m)	$Hs+1{,}28\sigma_r$ (m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2	0,693	0,150	0,368	0,022	0,123	0,178
5	1,609	0,187	0,766	0,045	0,130	0,245
10	2,303	0,215	1,118	0,065	0,132	0,299
25	3,219	0,252	1,598	0,093	0,133	0,372
50	3,912	0,280	1,966	0,115	0,133	0,427
100	4,605	0,308	2,335	0,136	0,133	0,482

Sumber: Hasil Perhitungan

Tabel 4.24
Perhitungan gelombang arah Timur Laut dengan metode Weibull

No.	Tahun	Hs_m	P	y_m	$Hs_m y_m$	y_m^2	$(Hs_m - Hr)^2$	$\hat{H}s_m$	$Hs_m - \hat{H}s_m$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2016	0,361	0,954	3,071	1,109	9,432	0,014	0,422	-0,060
2	2011	0,340	0,866	2,011	0,683	4,044	0,009	0,330	0,010
3	2010	0,329	0,779	1,508	0,496	2,274	0,007	0,287	0,042
4	2015	0,296	0,691	1,175	0,348	1,380	0,003	0,258	0,038
5	2014	0,263	0,604	0,926	0,244	0,857	0,000	0,236	0,027
6	2008	0,245	0,516	0,726	0,178	0,527	0,000	0,219	0,026
7	2009	0,217	0,429	0,560	0,122	0,313	0,001	0,205	0,013
8	2007	0,212	0,341	0,417	0,088	0,174	0,001	0,193	0,019
9	2012	0,209	0,254	0,293	0,061	0,086	0,001	0,182	0,027
10	2017	0,194	0,166	0,182	0,035	0,033	0,002	0,172	0,022
11	2013	0,000	0,079	0,082	0,000	0,007	0,059	0,164	-0,164
Jumlah		2,667	5,678	10,950	3,365	19,127	0,098		
Rerata		0,242		0,995					

Sumber: Hasil Perhitungan

Tabel 4.25
Perhitungan gelombang arah Timur Laut periode tertentu metode Weibull

Kala Ulang	y_r	Hs_r	σ_{nr}	σ_r	$Hs-1{,}28\sigma_r$	$Hs+1{,}28\sigma_r$
(tahun)	(tahun)	(m)			(m)	(m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2	0,693	0,216	0,368	0,036	0,170	0,263
5	1,609	0,295	0,766	0,076	0,198	0,393
10	2,303	0,355	1,118	0,111	0,213	0,497
25	3,219	0,434	1,598	0,158	0,232	0,637
50	3,912	0,494	1,966	0,195	0,245	0,743
100	4,605	0,554	2,335	0,231	0,258	0,850

Sumber: Hasil Perhitungan

Tabel 4.26
Perhitungan gelombang arah Tenggara dengan metode Weibull

No.	Tahun	Hs_m	P	y_m	$Hs_m y_m$	y_m^2	$(Hs_m - Hr)^2$	$\hat{H}s_m$	$Hs_m - \hat{H}s_m$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	2009	0,311	0,954	3,071	0,957	9,432	0,010	0,365	-0,054
2	2008	0,305	0,866	2,011	0,612	4,044	0,008	0,288	0,017
3	2007	0,273	0,779	1,508	0,411	2,274	0,004	0,251	0,022
4	2010	0,273	0,691	1,175	0,320	1,380	0,004	0,226	0,047
5	2012	0,223	0,604	0,926	0,207	0,857	0,000	0,208	0,016
6	2011	0,215	0,516	0,726	0,156	0,527	0,000	0,193	0,022
7	2014	0,190	0,429	0,560	0,106	0,313	0,001	0,181	0,009
8	2015	0,190	0,341	0,417	0,079	0,174	0,001	0,170	0,019
9	2016	0,190	0,254	0,293	0,056	0,086	0,001	0,161	0,029
10	2013	0,172	0,166	0,182	0,031	0,033	0,002	0,153	0,019
11	2017	0,000	0,079	0,082	0,000	0,007	0,045	0,146	-0,146
Jumlah		2,341	5,678	10,950	2,936	19,127	0,074		
Rerata		0,213		0,995					

Sumber: Hasil Perhitungan

Tabel 4.27
Perhitungan gelombang arah Tenggara periode tertentu metode Weibull

Kala Ulang	y_r	Hs_r	σ_{nr}	σ_r	$Hs - 1{,}28\sigma_r$	$Hs + 1{,}28\sigma_r$
(tahun)	(tahun)	(m)			(m)	(m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2	0,693	0,191	0,368	0,032	0,150	0,231
5	1,609	0,258	0,766	0,066	0,174	0,342
10	2,303	0,309	1,118	0,096	0,186	0,432
25	3,219	0,376	1,598	0,137	0,200	0,552
50	3,912	0,427	1,966	0,169	0,211	0,644
100	4,605	0,478	2,335	0,201	0,221	0,735

Sumber: Hasil Perhitungan

Untuk selanjutnya rekapitulasi perhitungan tinggi gelombang untuk masing-masing arah mata angin dengan berbagai kala ulang akan disajikan pada Tabel 4.28.

Tabel 4.28
Rekapitulasi Perhitungan tinggi gelombang metode Weibull

Kala Ulang (tahun)	Hs_r Timur (m)	Hs_r Timur Laut (m)	Hs_r Tenggara (m)	Hs_r Selatan (m)
2	0,150	0,216	0,191	0,412
5	0,187	0,295	0,258	0,519
10	0,215	0,355	0,309	0,600
25	0,252	0,434	0,376	0,707
50	0,280	0,494	0,427	0,788
100	0,308	0,554	0,478	0,869

Sumber: Hasil Perhitungan

Untuk perencanaan dinding penahan (*Retainingwall*) dengan jenis struktur fleksibel maka kala ulang gelombang yang digunakan adalah 25 tahun serta dari keempat arah gelombang datang menuju pantai Boom diambil gelombang signifikan yang paling besar yaitu H_S= 0,707 m dari arah Selatan.

4.3. Analisa Parameter Gelombang

Parameter-parameter gelombang yang akan dianalisis meliputi tinggi gelombang, periode gelombang, dan cepat rambat gelombang untuk masing-masing tinggi gelombang rencana dengan menggunakan Persamaan (2-30) dan (2-31).

Contoh perhitungan untuk analisa parameter gelombang di laut dalam dengan data gelombang arah Selatan sebagai berikut:

Kala ulang = 25 Tahun

H_0 = 0,707 m

- $H_0 = 0{,}0248 U_A^2$

  $U_A = (H_0/0{,}0248)^{0,5}$

  = 5,339 m/dt

- $T_0 = 0{,}8292\ U_A$

  = 0,8292 (5,339)

  = 4,427 dt

- $L_0 = 1{,}56\ T^2$

$= 1{,}56\ (4{,}427)^2$

$= 30{,}577$ m

- C_0 $= 1{,}56\ T$

  $= 1{,}56\ (4{,}427)$

  $= 6{,}906$ m/dt

Perhitungan parameter gelombang selengkapnya disajikan pada tabel berikut:

Tabel 4.29
Analisa parameter gelombang arah Timur

Kala Ulang Tahun [1]	H_0 m [2]	U_A m/dt [3]	T_0 dt [2]	L_0 m [3]	C_0 m/dt [3]
2	0,150444	2,462985	2,042307	6,506788	3,185999
5	0,18732	2,748312	2,278901	8,101685	3,555085
10	0,215215	2,945851	2,442699	9,308178	3,810611
25	0,252091	3,188254	2,6437	10,90307	4,124172
50	0,279987	3,360027	2,786134	12,10957	4,346369
100	0,307882	3,523435	2,921632	13,31606	4,557747

Sumber: Hasil Perhitungan

Tabel 4.30
Analisa parameter gelombang arah Timur Laut

Kala Ulang Tahun [1]	H_0 m [2]	U_A m/dt [3]	T_0 dt [2]	L_0 m [3]	C_0 m/dt [3]
2	0,216366	2,953717	2,449222	9,357954	3,820786
5	0,29542	3,451393	2,861895	12,77709	4,464557
10	0,355223	3,784639	3,138223	15,36357	4,895628
25	0,434277	4,184635	3,469899	18,78271	5,413043
50	0,494079	4,463468	3,701108	21,36919	5,773728
100	0,553881	4,725879	3,918699	23,95567	6,11317

Sumber: Hasil Perhitungan

Tabel 4.31
Analisa parameter gelombang arah Tenggara

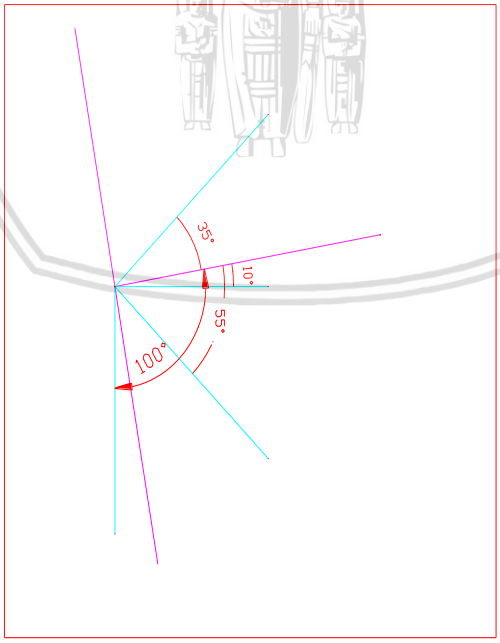
Kala Ulang Tahun [1]	H_0 m [2]	U_A m/dt [3]	T_0 dt [2]	L_0 m [3]	C_0 m/dt [3]
2	0,190603	2,772292	2,298785	8,24368	3,586104
5	0,257984	3,225303	2,674422	11,15795	4,172098
10	0,308956	3,529575	2,926723	13,36251	4,565688
25	0,376337	3,895494	3,230144	16,27677	5,039025
50	0,427309	4,150927	3,441948	18,48133	5,369439
100	0,478281	4,391527	3,641454	20,68589	5,680668

Sumber: Hasil Perhitungan

4.4 Analisa Deformasi Gelombang

4.4.1 Analisa Refraksi

Dalam perencanaan bangunan *retainingwall* di pantai Boom didapatkan gelombang yang paling dominan berasal dari arah Selatan yang membentuk sudut 10° terhadap garis normal dan 100° terhadap garis pantai. Sudut gelombang datang (α) dibentuk oleh garis kedalaman pantai dan garis puncak gelombang atau bisa juga dibentuk oleh garis arah datang gelombang dan garis normal (tegak lurus) pantai.



Gambar 4.6 Sketsa sudut datang puncak gelombang di pantai Boom
Sumber: Hasil Perhitungan

Tabel 4.32
Arah angin yang digunakan dalam perencanaan

No.	Arah	Sudut Datang Gelombang Terhadap		Sudut Datang Gelombang	Keterangan
		Garis Pantai	Garis Normal		
1	Timur	80°	10°	10°	Dari arah laut
2	Timur Laut	55°	35°	35°	Dari arah laut
3	Tenggara	35°	55°	55°	Dari arah laut
4	Selatan	10°	100°	100°	Dari arah laut

Sumber: Hasil Perhitungan

Contoh perhitungan refraksi dan pendangkalan gelombang dengan menggunakan data gelombang arah Selatan dengan kala ulang 25 tahun sebagai berikut:

α_0 = 100°

H_0 = 0,707 m

T_0 = 4,427 detik

L_0 = 30,577 m

Berdasarkan kedalaman relatif yaitu perbandingan antara kedalaman air (d) dan panjang gelombang (L) diketahui bahwa batas gelombang laut dalam adalah $d/L \geq 1/2$. Jadi apabila gelombang yang terjadi kurang dari batas tersebut, maka gelombang tersebut akan mengalami refraksi dan pendangkalan.

d/L_0 = 0,5

d = 0,5 x L_0

= 0,5 x 30,577

= 15,289 m

Maka perhitungan refraksi dimulai pada kedalaman 15,289 m dan akan berhenti pada saat d = 5 dimana gelombang masuk pada analisa difraksi.

- d = 15,000 m
- $d/L_0 = \frac{15,000}{30,577}$

  = 0,491
- d/L = 0,493 (Tabel L-1. Triatmodjo, 2008, p.394)
- $L = \frac{d}{d/L}$

  $= \frac{15,000}{0,493}$

  = 30,426 m

- T $= \left(\frac{L\ 2\ \pi}{g \tanh \frac{2\pi d}{L}} \right)^{1/2}$

  $= \left(\frac{30{,}426\ \text{x}\ 2\ \text{x}\ 3{,}14}{9{,}81\ \text{x} \tanh \frac{2\ \text{x}\ 3{,}14\ \text{x}15}{30{,}426}} \right)^{1/2}$

  = 4,422 detik

- C $= \frac{L_{n-1}}{T_{n-1}}$

  $= \frac{30{,}455}{4{,}427}$

  = 6,879 m/detik

- C_1 $= \frac{L}{T}$

  $= \frac{30{,}426}{4{,}422}$

  = 6,88 m/detik

- Sin α $= \left(\frac{C}{C_1} \right) \sin \alpha_0$

  $= \left(\frac{6{,}879}{6{,}88} \right) \sin 35°$

  = 0,985

- α = arcsin (sin α)

  = arcsin (0,985)

  = 80,046°

- Kr $= \sqrt{\frac{\cos \alpha_0}{\cos \alpha}}$

  $= \sqrt{\frac{\cos 80°}{\cos 80{,}046°}} = 1{,}002$

- n_0 $= \frac{1}{2} \left(1 + \frac{4\pi d/l_0}{\sinh (4\pi d/l_0)} \right)$

  $= \frac{1}{2} \left(1 + \frac{4\ \text{x}\ 3{,}14\ \text{x}\ 0{,}491}{\sinh (4\ \text{x}\ 3{,}14\ \text{x}\ 0{,}491)} \right)$

  = 0,513

- n $= \frac{1}{2} \left(1 + \frac{4\pi d/l}{\sinh (4\pi d/l)} \right)$

  $= \frac{1}{2} \left(1 + \frac{4\ \text{x}\ 3{,}14\ \text{x}\ 0{,}493}{\sinh (4\ \text{x}\ 3{,}14\ \text{x}\ 0{,}493)} \right)$

  = 0,513

- Ks $= \sqrt{\frac{n_0 L_0}{n L}}$

  $= \sqrt{\frac{0{,}513 \text{ x } 30{,}455}{0{,}513 \text{ x } 30{,}426}}$

  = 1,001

- H'_0 = Kr x Ks x H_0

  = 1,002 x 1,001 x 0,707

  = 0,709 m

Dengan contoh perhitungan seperti diatas, berikut akan ditampilkan perhitungan refraksi gelombang arah Timur, Timur Laut, Tenggara dan Selatan:

Tabel 4.33
Perhitungan refraksi gelombang arah Timur

d (m)	d/Lo	d/L	L (m)	T detik	C m/dt	C1 m/dt	Sin α	α	Kr	n0	n	Ks	H (m)
5,452	0,500	0,502	10,863	2,644	4,124	4,109	0,174	10,000	-	-	-	-	0,252
5,000	0,459	0,462	10,828	2,641	4,109	4,100	0,173	9,978	1,000	0,518	0,518	1,002	0,253

Sumber: Hasil Perhitungan

Tabel 4.34
Perhitungan refraksi gelombang arah Timur Laut

d (m)	d/Lo	d/L	L (m)	T detik	C m/dt	C1 m/dt	Sin α	α	Kr	n0	n	Ks	H (m)
9,391	0,500	0,502	18,708	3,470	5,413	5,391	0,574	35,000	-	-	-	-	0,434
9,000	0,479	0,481	18,701	3,468	5,391	5,392	0,574	35,004	1,000	0,515	0,514	1,001	0,435
8,000	0,426	0,430	18,611	3,467	5,392	5,368	0,571	34,818	0,999	0,525	0,524	1,003	0,435
7,000	0,373	0,379	18,450	3,466	5,368	5,323	0,569	34,668	0,999	0,543	0,541	1,007	0,438
6,000	0,319	0,329	18,218	3,470	5,323	5,250	0,566	34,453	0,999	0,573	0,566	1,012	0,443
5,000	0,266	0,282	17,739	3,469	5,250	5,114	0,559	33,963	0,997	0,618	0,603	1,026	0,453

Sumber: Hasil Perhitungan

Tabel 4.35
Perhitungan refraksi gelombang arah Tenggara

d (m)	d/Lo	d/L	L (m)	T detik	C m/dt	C1 m/dt	Sin α	α	Kr	n0	n	Ks	H (m)
8,138	0,500	0,502	16,212	3,230	5,039	5,019	0,819	55,000	-	-	-	-	0,376
8,000	0,491	0,493	16,227	3,230	5,019	5,024	0,820	55,090	1,001	0,513	0,513	1,000	0,377
7,000	0,430	0,434	16,140	3,228	5,024	5,000	0,815	54,597	0,994	0,524	0,523	1,004	0,376
6,000	0,369	0,376	15,973	3,226	5,000	4,951	0,811	54,208	0,995	0,545	0,542	1,008	0,377
5,000	0,307	0,318	15,702	3,229	4,951	4,863	0,805	53,569	0,992	0,581	0,573	1,016	0,380

Sumber: Hasil Perhitungan

Tabel 4.36
Perhitungan refraksi gelombang arah Selatan

d (m)	d/Lo	d/L	L (m)	T detik	C m/dt	C1 m/dt	Sin α	α	Kr	n0	n	Ks	H (m)
15,289	0,500	0,502	30,455	4,427	6,907	6,879	0,985	80,000	-	-	-	-	0,707
15,000	0,491	0,493	30,426	4,422	6,879	6,880	0,985	80,046	1,002	0,513	0,513	1,001	0,709
14,000	0,458	0,461	30,381	4,424	6,880	6,868	0,983	79,446	0,971	0,518	0,518	1,001	0,690
13,000	0,425	0,429	30,310	4,425	6,868	6,850	0,982	79,164	0,987	0,526	0,525	1,002	0,682
12,000	0,392	0,397	30,200	4,427	6,850	6,822	0,981	78,764	0,982	0,536	0,534	1,003	0,672
11,000	0,360	0,367	29,956	4,423	6,822	6,773	0,978	77,894	0,964	0,549	0,546	1,007	0,653
10,000	0,327	0,337	29,704	4,425	6,773	6,713	0,976	77,451	0,982	0,568	0,562	1,010	0,648
9,000	0,294	0,307	29,342	4,427	6,713	6,628	0,972	76,480	0,964	0,592	0,582	1,015	0,633
8,000	0,262	0,278	28,741	4,421	6,628	6,500	0,966	74,982	0,950	0,623	0,606	1,024	0,616
7,000	0,229	0,250	28,028	4,424	6,500	6,336	0,960	73,708	0,961	0,663	0,636	1,033	0,612
6,000	0,196	0,222	27,057	4,427	6,336	6,112	0,950	71,808	0,948	0,711	0,673	1,047	0,607
5,000	0,164	0,195	25,644	4,418	6,112	5,804	0,935	69,268	0,939	0,768	0,713	1,066	0,608

Sumber: Hasil Perhitungan

4.4.2 Analisa Difraksi (Pembelokan Gelombang)

Difraksi gelombang terbentuk apabila gelombang datang terhalang oleh suatu rintangan seperti pemecah gelombang atau pulau, maka gelombang tersebut akan membelok di sekitar ujung rintangan dan masuk daerah terlindung di belakangnya.

Contoh perhitungan difraksi gelombang dengan menggunakan data gelombang arah Selatan dengan kala ulang 25 tahun sebagai berikut:

β = 60°

γ = 69,268°

H_0 = 0,707 m

T_0 = 4,427 detik

L_0 = 30,577 m

r = 194 m

Maka perhitungan difraksi dimulai pada kedalaman 5 m dan akan berhenti pada saat d = 1 m.

- d = 5,000 m
- $d/L_0 = \frac{5,000}{30,577}$
  = 0,164
- d/L = 0,195 (Tabel L-1. Triatmodjo, 2008, p.394)
- $L = \frac{d}{d/L}$

$= \frac{5,000}{0,195}$

= 25,644 m

- T $= \left(\frac{L\ 2\ \pi}{g \tanh \frac{2\pi d}{L}} \right)^{1/2}$

$= \left(\frac{25,644\ \text{ x } 2 \text{ x } 3,14}{9,81 \text{ x } \tanh \frac{2 \text{ x } 3,14 \text{ x } 5}{25,644}} \right)^{1/2}$

= 4,418 detik

- H = 0,608 m (H refraksi pada d = 5)
- r/L $= \frac{194}{25,644}$ = 7,565 m
- K’ = 0,345 (Tabel Koefisien Difraksi. Triatmodjo, 2008, p.82)
- Hdf = K’ x H

= 0,345 x 0,608

= 0,21 m

Dengan contoh perhitungan seperti diatas, berikut akan ditampilkan perhitungan difraksi gelombang arah Timur, Timur Laut, Tenggara, dan Selatan:

Tabel 4.37
Perhitungan difraksi gelombang arah Timur

d (m)	d/Lo	d/L	L (m)	T detik	H (m)	r/L	K'	Hdf (m)
5,000	0,459	0,462	10,828	2,641	0,253	17,917	1,354186	0,342124
4,000	0,367	0,374	10,702	2,642	0,342	18,127	1,359519	0,465124
3,000	0,275	0,290	10,352	2,643	0,465	18,740	1,375063	0,639575
2,000	0,183	0,211	9,486	2,645	0,640	20,451	1,418451	0,907205
1,000	0,092	0,134	7,464	2,638	0,907	25,990	1,558894	1,414237

Sumber: Hasil Perhitungan

Tabel 4.38
Perhitungan difraksi gelombang arah Timur Laut

d (m)	d/Lo	d/L	L (m)	T detik	H (m)	r/L	K'	Hdf (m)
5,000	0,266	0,282	17,739	3,469	0,453	10,936	1,087185	0,492669
4,000	0,213	0,236	16,941	3,468	0,493	11,451	1,091967	0,537978
3,000	0,160	0,192	15,654	3,465	0,538	12,393	1,100707	0,592156
2,000	0,106	0,146	13,682	3,476	0,592	14,179	1,117295	0,661613
1,000	0,053	0,097	10,282	3,476	0,662	18,868	1,160827	0,768018

Sumber: Hasil Perhitungan

Tabel 4.39
Perhitungan difraksi gelombang arah Tenggara

d (m)	d/Lo	d/L	L (m)	T detik	H (m)	r/L	K'	Hdf (m)
5,000	0,307	0,318	15,702	3,229	0,380	12,355	0,8031	0,305111
4,000	0,246	0,264	15,128	3,226	0,305	12,824	0,8073	0,246329
3,000	0,184	0,212	14,172	3,231	0,246	13,689	0,8153	0,20082
2,000	0,123	0,161	12,448	3,227	0,201	15,585	0,8326	0,167202
1,000	0,061	0,105	9,498	3,240	0,167	20,426	0,8769	0,146616

Sumber: Hasil Perhitungan

Tabel 4.40
Perhitungan difraksi gelombang arah Selatan

d (m)	d/Lo	d/L	L (m)	T detik	H (m)	r/L	K'	Hdf (m)
5,000	0,164	0,195	25,644	4,418	0,608	7,565	0,3452	0,20983
4,000	0,131	0,167	23,893	4,422	0,210	8,119	0,3400	0,07134
3,000	0,098	0,139	21,546	4,427	0,071	9,004	0,3317	0,023661
2,000	0,065	0,109	18,318	4,439	0,024	10,590	0,3167	0,007494
1,000	0,033	0,075	13,319	4,405	0,007	14,566	0,2793	0,002093

Sumber: Hasil Perhitungan

Dari perhitungan tabel diatas di peroleh nilai H difraksi pada kedalaman 1 arah Timur sebesar 1,414 m, arah Timur Laut sebesar 0,768 m, arah Tenggara sebesar 0,147 m dana rah Selatan sebesar 0,002 m. Untuk perhitungan selanjutnya nilai H yang digunakan adalah nilai yang paling maksimum yaitu dari arah Timur sebesar 1,414 m.

4.4.3 Analisa Refleksi

Gelombang yang dalam perambatannya menemui rintangan, misalnya bangunan laut, bisa dipantulkan secara sempurna (100%) atau hanya sebagian saja sementara sebagian lainnya diserap atau diteruskan melalui rintangan tersebut. Besar kemampaun suatu bangunan memantulkan gelombang diberikan oleh koefisien refleksi. Besar koefisien refleksi untuk tumpukan batu sisi miring adalah 0,3 – 0,6. Dalam perencanaan ini analisa refleksi diabaikan sebab pengaruhnya terlalu kecil sehingga tidak berpengaruh terhadap perubahan deformasi gelombang.

4.4.4 Analisa Gelombang Pecah

Perhitungan gelombang pecah berdasarkan pada tinggi gelombang signifikan arah Timur kala ulang 25 tahun dengan data sebagai berikut:

m = 0,02

H = 1,414 m

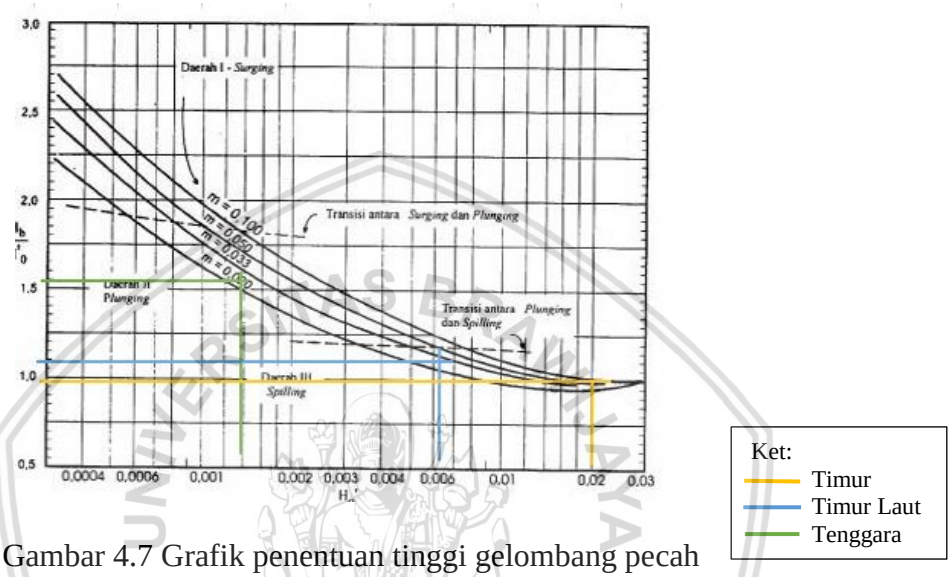
T = 2,638 detik

Contoh perhitungan gelombang pecah arah Timur adalah sebagai berikut:

- $\frac{H'_0}{gT^2} = \frac{= 1{,}414}{9{,}81 \text{ x } 2{,}638^2}$

  $= 0{,}0207$

Dengan nilai tersebut dan m = 0,02 dari grafik penentuan tinggi gelombang pecah pada gambar 4.7 diperoleh $H_b/H'_0 = 0{,}9$



Gambar 4.7 Grafik penentuan tinggi gelombang pecah
Sumber: Triatmodjo (2008,p.96)

- $\frac{H_b}{H'_0} = 0{,}9$

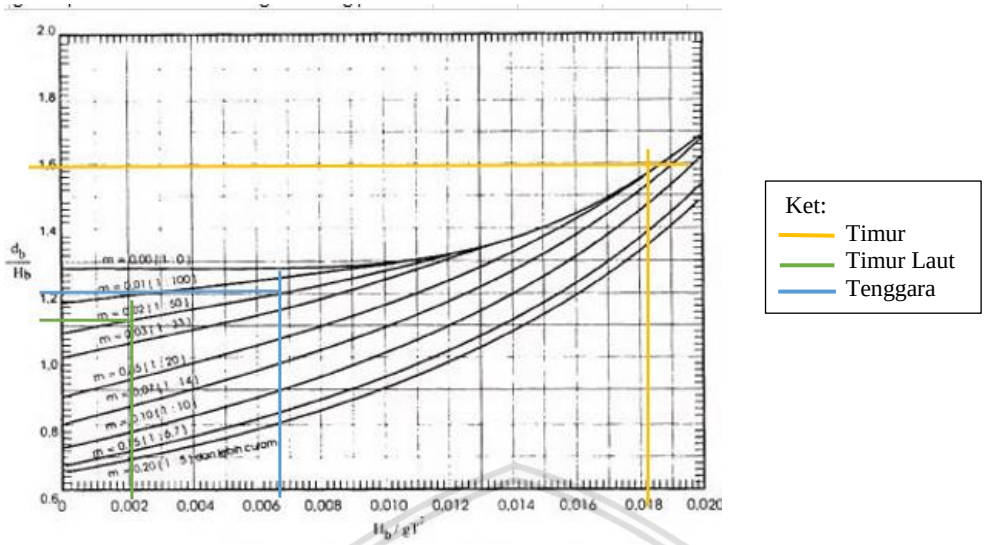
  $H_b = 0{,}9 \text{ x } 1{,}414$

  $= 1{,}27 \text{ m}$

- $\frac{H_b}{gT^2} = \frac{1{,}27}{9{,}81 \text{ x } 2{,}638^2}$

  $= 0{,}0186$

Dengan nilai tersebut dan m = 0,02 dari grafik penentuan kedalaman gelombang pecah (Triatmodjo, 2008:97) diperoleh $d_b/H_b = 1{,}58$



Gambar 4.8 Grafik penentuan kedalaman gelombang pecah
Sumber: Triatmodjo (2008,p.97)

- $\frac{d_b}{H_b}$ = 1,58
- d_b = 1,58 x 1,27
  = 2,01 m

Dengan cara dan langkah yang sama seperti contoh perhitungan diatas, berikut ini ditampilkan perhitungan tinggi dan kedalaman gelombang pecah:

Tabel 4.41
Rekapitulasi Tinggi dan Kedalaman Gelombang Pecah

Arah	Hi	T	Hi/gt2	Hb/Hi	Hb	Hb/gt2	db/Hb	db
	m	dtk			m			m
Timur	1,414	2,638	0,0207	0,9	1,27	0,0186	1,58	2,01
Timur Laut	0,768	3,48	0,0065	1,05	0,81	0,0068	1,2	0,97
Tenggara	0,15	3,24	0,0014	1,5	0,22	0,0021	1,12	0,25

Sumber: Hasil Perhitungan

4.5 Elevasi Muka Air Laut Rencana

4.5.1 *Wave Setup*

Perhitungan *wave setup* mengunakan parameter-parameter yang didapat dari analisa gelombang pecah:

Hb = 1,273 m (arah timur)

db = 2,01 m

T = 2,638 detik

$$Sw = 0,19\left[1\text{-}2,82\sqrt{\frac{Hb}{gT^2}}\right]Hb$$

$$= 0,19\left[1\text{-}2,82\sqrt{\frac{1,273}{9,81 \times (2,638)^2}}\right]1,273$$

$$= 0,149 \text{ m}$$

4.5.2 Pasang Surut

Berdasarkan data pasang surut yang diperoleh, diketahui tinggi muka air di Pantai Boom Banyuwangi adalah sebagai berikut:

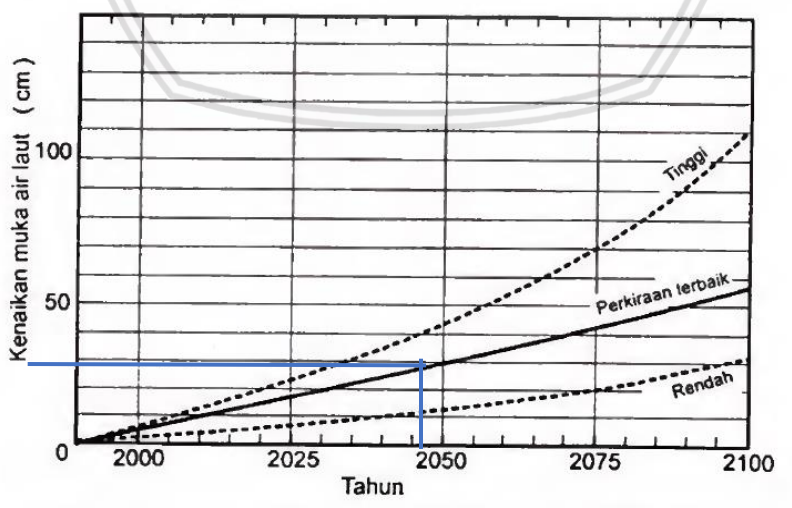
Tabel 4.42
Elevasi muka air laut di Pantai Boom

	ELEVASI (m)
Highest High Water Level (HHWL)	2,5
Mean High Water Level (MHWL)	2,5
Mean Sea Level (MSL)	1,47
Mean Low Water Level (MLWL)	0,5
Low Lowest Water Level (LLWL)	0,5

Sumber: Hasil Peritungan

4.5.3 Pemanasan Global

Pemansan global tiap tahunnya akan bertambah karena adanya pengaruh efek rumah kaca yang membuat memanasnya suhu bumi sehingga menyebabkan mencairnya es di kutub dan membuat naiknya muka air laut. Untuk mengetahui kanaikan muka air laut akibat pemanasan global dapat dilihat pada grafik dibawah ini.



Gambar 4.9 Grafik perkiraan kanaikan muka air laut akibat pemanasan global
Sumber: Triatmodjo (2008,p.115)

Berdasarkan grafik diatas, perkiraan besarnya kenaikanmuka air laut sampai tahun 2042 diperkirakan sekitar 25 cm atau 0,25 m.

4.5.4 Muka Air Laut Rencana

Elevasi muka air laut rencana merupakan penjumlahan dari parameter berikut ini

HHWL = 2,5 m

Sw = 0,149 m

SLR = 0,25 m

Sesuai dengan Persamaan (2-45) maka diperoleh nilai DWL (*design water level*) sebagai berikut:

DWL = HHWL + Sw + SLR (*Sea Level Rise*)

= 2,5 + 0,149 + 0,25

= 2,899 m

4.6 Dimensi Bangunan *Retainingwall*

4.6.1 Tinggi Puncak Bangunan

Tinggi bangunan *retainingwall* didapat dari persamaan berikut:

El. Puncak = DWL + Ru + tinggi jagaan + db

Ru atau *runup* didapatkan menggunakan Persamaan (2-49) dan Gambar 4.10. Ketinggian gelombang yang digunakan adalah ketinggian gelombang di depan bangunan *retainingwall* atau gelombang yang telah dipengaruhi refraksi difraksi serta refleksi. Sehingga digunakan tinggi gelombang dari arah Timur sebesar 0,885 m karena merupakan gelombang tertinggi dibandingkan dengan gelombang dari mata angin lainnya.

H = 1,414 m

L_o = 10,903 m (arah Timur kala ulang 25 tahun)

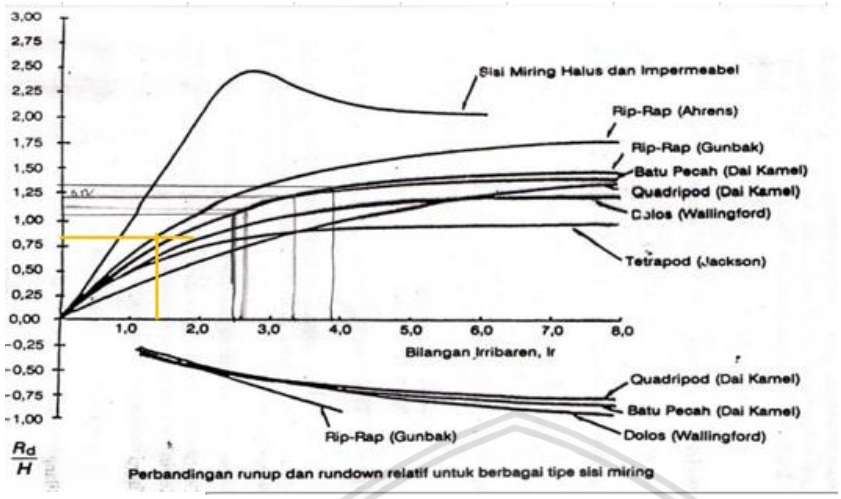
Kemiringan konstruksi = 1:2

$$Ir = \frac{tg\theta}{(H / L_0)^{0,5}}$$

$$= \frac{(1/\cot\theta)}{(1{,}414 \ / 10{,}903)^{0,5}}$$

$$= 1{,}39$$

Dari Gambar 4.10 untuk batu pecah dengan nilai Ir = 1,39 maka diperoleh nilai R_u/H = 0,8



Gambar 4.10 Grafik runup gelombang
Sumber: Triatmodjo (1999,p.269)

R_u/H = 0,8

Ru = 0,8 x 1,414

= 1,131

Dari perhitungan diatas dan dengan mengambil nilai tinggi jagaan bangunan sebesar 0,5 m maka dapat dihitung dan digambarkan elevasi muka air rencana dan elevasi puncak bangunan seperti berikut ini:

El. Puncak = DWL + Ru + tinggi jagaan + db

= 2,899 + 1,131+ 0,5 + 2,01

= 6,541 m ≈ 6,54 m

4.6.2 Unit Lapisan Penyusun

Dalam desain bangunan *retainingwall* digunakan struktur tumpukan batu alam (pecah bersudut kasar). Contoh perhitungan penentuan jenis lapisan pelindung atau *armor* dijelaskan sebagai berikut:

γr = 2,20 t/m^3

γw = 1,027 t/m^3

K_d = 2,0 (Tabel 2.5)

Cot θ = 2 (Tabel 2.5)

$S_r = \frac{\gamma_r}{\gamma_w}$

$$= \frac{2{,}20}{1{,}027} = 2{,}14$$

H = 1,414 m (Tinggi gelombang datang H_i arah Timur)

$$W = \frac{\gamma_r H^3}{K_d (S_r - 1)^3 \cot\theta}$$

$$= \frac{2{,}20 \times 1{,}414^3}{2(2{,}14 - 1)^3 2}$$

$$= 1{,}044 \text{ ton} \approx 1044 \text{ kg}$$

Tabel 4.43
Jenis Batuan pada *retainingwall*

Jenis Batu	Berat Batu	
	(ton)	(kg)
W	1,04411	1044,1
W10	0,104411	104,4
W200	0,005221	5,2
W1000	0,001044	1,0

Sumber: Hasil Peritungan

Lebar puncak *retainingwall* dengan jenis batu alam kasar dicari dengan perhitungan sebagai berikut:

n = 3 (Tabel 2.6)

k_Δ = 1,15 (Tabel 2.6)

γr = 2,20 t/m^3

W = 1,044 ton

$$B = nk_\Delta \left(\frac{W}{\gamma_r}\right)^{1/3}$$

$$= 3 \times 1{,}15 \times \left(\frac{1{,}044}{2{,}20}\right)^{1/3}$$

$$= 2{,}69 \text{ m}$$

Tebal lapisan pelindung puncak *retainingwall* dihitung sebagai berikut:

n = 2

k_Δ = 1,15

$$t = nk_\Delta \left(\frac{W}{\gamma_r}\right)^{1/3}$$

$= 2 \times 1{,}15 \times \left(\frac{1{,}044}{2{,}20}\right)^{1/3}$

$= 1{,}79\text{m}$

Jumlah butir batu per luas permukaan 100 m^2

A = 100 m^2

n = 2

k_Δ = 1,15

P = 37% (Porositas rerata tabel 2.8)

γr = 2,20 t/m^3

W = 1,044 ton

N $= Ank_\Delta\left(1-\frac{P}{100}\right)\left(\frac{\gamma_r}{W}\right)^{2/3}$

$= 100x2x1{,}15\left(1-\frac{37}{100}\right)\left(\frac{2{,}20}{1{,}044}\right)^{2/3}$

$= 238{,}151 \approx 240$ butir

Perhitungan diameter batu alam berdasarkan besar unit batu alam W diperoleh volume.

V $= \left(\frac{W}{\gamma_r}\right)$

$= \left(\frac{1{,}044}{2{,}20}\right)$

$= 0{,}4746\ m^3$

Bentuk batu alam diasumsikan sebagai bola, maka dengan rumus volume bola dapat didekati panjang jari-jari batuan.

V = 4/3 x π x r^3

r $= \left(\frac{V}{(4/3)x\pi}\right)^{1/3}$

$= \left(\frac{0{,}4746}{(4/3)x3{,}14}\right)^{1/3}$

$= 0{,}484$ m

D = 2 x r

= 2 x 0,484 = 0,97 m

Untuk perhitungan diameter batu tiap lapis selanjutnya akan ditabelkan sebagai berikut:

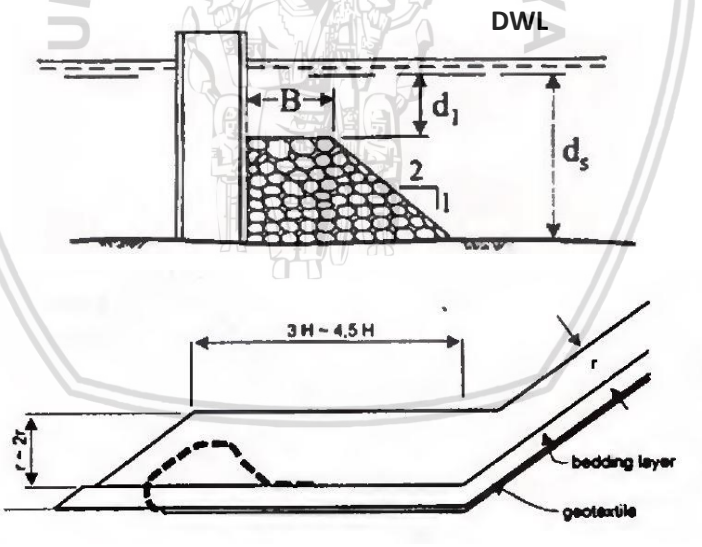
Tabel 4.44
Perhitungan diameter batu untuk setiap jenis batu

Jenis Batu	Berat Batu (ton)	V (m3)	r (m)	D (m)
W	1,0441	0,47460	0,48397	0,97
W10	0,1044	0,04746	0,22464	0,45
W200	0,0052	0,00237	0,08276	0,17
W1000	0,0010	0,00047	0,04840	0,10

Sumber: Perhitungan

4.6.3 Lapisan Pelindung kaki

Lapisan pelindung kaki berfungsi untuk melindungi tanah pondasi terhadap gerusan akibat gelombang.



Gambar 4.11 Sketsa lapisan pelindung kaki
Sumber: Triatmodjo (1999,p.270)

H = 1,414 m

ds = DWL

= 2,899 m

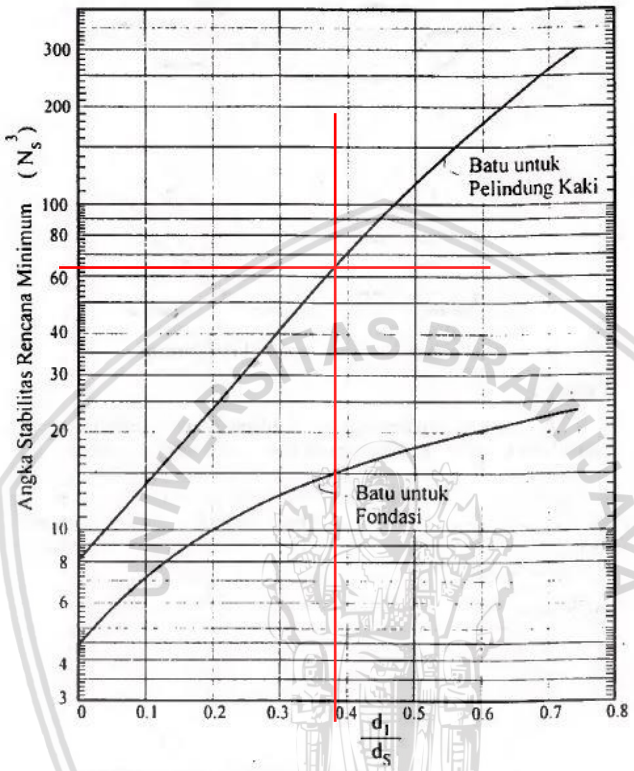
d_1 = ds – t

= 2,899 – 1,79

= 1,105 m

d_1/ds = 1,105 / 2,899

= 0,38



Gambar 4.12 Grafik Hubungan antara d_1/ds dan Ns^3
Sumber: Triatmodjo (1999,p.271)

Dengan nilai d_1/ds = 0,38 diplotkan kedalam grafik hubungan antara d_1/ds dan Ns^3 untuk batu pelindung kaki diperoleh nilai Ns^3 = 64

Ns = $64^{1/3}$

= 4

$S_r = \frac{\gamma_r}{\gamma_w}$

$= \frac{2,20}{1,027} = 2,14$

$W = \frac{\gamma_r H^3}{Ns(S_r - 1)^3}$

$$= \frac{2{,}20 \times 1{,}414^3}{4(2{,}14-1)^3}$$

$= 1{,}044 \text{ ton} \approx 1044 \text{ kg}$

Bentuk batu alam pada lapisan pelindung kaki diasumsikan sebagai bola, maka dengan rumus volume bola dapat didekati panjang jari-jari batuan.

$$V = \left(\frac{W}{\gamma_r}\right)$$

$$= \left(\frac{1{,}044}{2{,}20}\right)$$

$= 0{,}47 \text{ m}^3$

$V = 4/3 \text{ x } \pi \text{ x } r^3$

$$r = \left(\frac{V}{(4/3)x\pi}\right)^{1/3}$$

$$= \left(\frac{0{,}47}{(4/3)x3{,}14}\right)^{1/3}$$

$= 0{,}48 \text{ m}$

$D = 2 \text{ x } r$

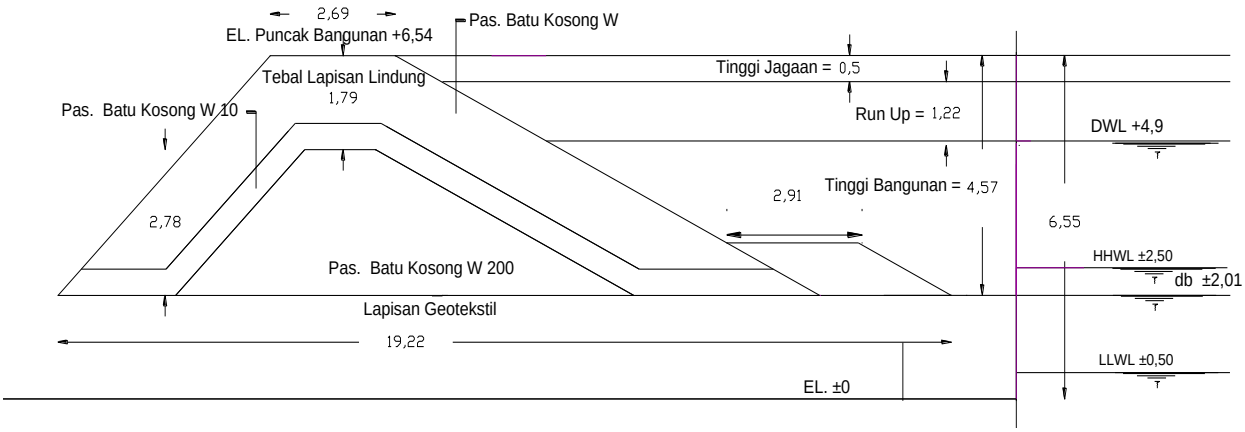
$= 2 \text{ x } 0{,}48 = 0{,}97 \text{ m}$

Perhitungan lebar lapis Pelindung kaki pada *retainingwall* adalah sebagai berikut:

$B = 2H$

$= 2 \text{ x } 1{,}414$

$= 2{,}83 \text{ m}$



Gambar 4.13 Perencanaan Bangunan
Sumber: Hasil Perhitungan

4.7 Stabilitas Struktur

4.7.1 Gaya Vertikal

Dalam analisa stabilitas bangunan perlu dihitung gaya yang diakibatkan oleh gelombang. Dari hasil perhitungan deformasi gelombang tiap arah mata angin, diketahui bahwa gaya-gaya yang terjadi pada struktur adalah gaya gelombang telah pecah. Rumus ini dapat digunakan untuk berbagai kondisi gelombang. Berikut contoh perhitungan untuk gelombang yang terbentuk dari arah Timur:

γ_{laut} = 1,027 ton/m^3

γ_{batu} = 2,200 ton/m^3

kemiringan lereng *seawall* = 1 : 2

β = 10^0 (arah timur)

h = 1,899 m

d’ = 1,899 m

dc = 1,631 m

H = 2,899 m

H max = 1,8 x H

= 5,218 m

g = 9,81

dbw = 2,899 m

d = 2,899 m

Lo = 10,903 m (dari perhitungan analisa parameter gelombang arah Timur kala ulang 25 tahun)

d/L_0 = 2,899 /10,903

= 0,2658

d/L = 0,2818 dari tabel hubungan d/L

4πd/L = 3,542 dari tabel hubungan d/L

sinh 4πd/L = 17,254 dari tabel hubungan d/L

cosh 2πd/L = 3,023 dari tabel hubungan d/L

Koefisien tekanan gelombang:

$$\alpha_1 = 0{,}6 + \frac{1}{2}\left\{\frac{4\pi d/L}{\sinh(4\pi d/L)}\right\}^2$$

$$= 0{,}6 + \frac{1}{2}\left\{\frac{3{,}542}{17{,}254}\right\}^2$$

= 0,621

$$\alpha_2 = min\left\{\frac{d_{bw} - h}{3d_{bw}}\left(\frac{H_{max}}{h}\right)^2, \frac{2d}{H_{max}}\right\}$$

$$= min\{0{,}8684; 1{,}1111\}$$

= 0,8684

$$\alpha_3 = 1 - \frac{d'}{d}\left\{1 - \frac{1}{\cosh(2\pi d/L)}\right\}$$

$$= 1 - \frac{1{,}899}{2{,}899}\left\{1 - \frac{1}{3{,}023}\right\}$$

= 0,562

Tekanan gelombang:

$$p_1 = \frac{1}{2}(1 + cos\beta)(a_1 + a_2 cos^2\beta)\gamma_0 H_{max}$$

$$= \frac{1}{2}(1 + cos10)(0{,}621 + 0{,}8684 cos^2 10)1\,.\,5{,}218$$

= 4,48 ton/m^2

$$p_2 = \frac{p_1}{\cosh(2\pi d/L)}$$

$$= \frac{4{,}48}{3{,}023}$$

= 1,482 ton/m^2

$$p_3 = a_3 p_1$$

= 0,562. 4,48

= 2,516 ton/m^2

Tekanan uplift:

$p_u = \frac{1}{2}(1 + cos\beta)\alpha_1 a_3 \gamma_w H_{max}$

$= \frac{1}{2}(1 + cos10)0{,}621 \,.\, 0{,}562 \,.\, 1 \,.\, 5{,}218$

= 1,068 ton/m^2

Elevasi maksimum dimana tekanan gelombang bekerja:

$n^* = 0{,}75(1 + cos\beta)H_{max}$

$= 0{,}75(1 + cos10)5{,}218$

= 4,593

$p_4 = p_1\left(1 - \frac{dc}{n^*}\right)$

$= 4{,}48\left(1 - \frac{1{,}631}{4{,}593}\right)$

= 2,889 ton/m^2

Gaya Gelombang:

$p = \frac{1}{2}(p1 - p3)d' + \frac{1}{2}(p1 + p4){d_c}^*$

$= \frac{1}{2}(4{,}48 - 2{,}516)1{,}899 + \frac{1}{2}(4{,}48 + 2{,}889\ )1{,}631$

= 12,65 ton

$Mp = \left(\frac{1}{6}(2P1 + P3)d'^2\right) + \left(\frac{1}{2}(P1 + P4)d' \times {d_c}^*\right) + \left(\frac{1}{6}(P1 + 2P4){{d_c}^*}^2\right)$

$= \left(\frac{1}{6}(2.4{,}48 + 2{,}516)1{,}899^2\right) + \left(\frac{1}{2}(4{,}48 + 2{,}889)1{,}899 \times 1{,}631\ \right)$

$+ \left(\frac{1}{6}(4{,}48 + 2.2{,}889)1{,}631^2\right)$

= 22,86 ton m

Gaya angkat:

$u = \frac{1}{2}p_u B$

$= \frac{1}{2}\,.\,1{,}068\,.\,19{,}22$

= 10,26 ton

$Mu = \frac{2}{3} u \,.\, B$

$= \frac{2}{3} \,.\, 10{,}26 \,.\, 19{,}22$

= 131,51 ton m

4.7.2 Stabilitas Geser

Gaya-gaya yang menggeser dinding penahan tanah akan ditahan oleh gesekan antara tanah dan dasar pondasi serta tekanan tanah pasif bila di depan dinding penahan terdapat tanah timbunan.

☆ Keadaan Normal

Sf = (f . ∑ V) / ∑ H > 1.5

= (1 . (136,434 – 10,26)) / 12,653 >1,5

= 9,971 >1,5

☆ Keadaan Gempa

Sf = (f . ∑ V) / ∑ H > 1.3

= (1 . (136,434 – 10,26)) / 12,653 >1,3

= 9,971 >1,3

Tabel 4.45
Perhitungan gaya pada bangunan

Luasan	Luas (m2)	γ ton / m^3	Gaya ton / m
W	19,0462	2,2	41,902
W10	11,5537	2,2	25,418
W200	15,8124	2,2	34,787
E1	10,4332	1,9	19,776
WA	14,1681	1,0	14,551
		V	136,434
		SH	12,653

Sumber: Perhitungan

4.7.3 Stabilitas Terhadap Daya Dukung Tanah

Daya dukung tanah pondasi menerus pada pantai Boom digunakan untuk mengetahui apakah tanah dibawah bangunan dapat menahan berat sendiri struktur tersebut. Perhitungan daya dukung tanah pondasi menerus mengunakan Persamaan (2-56) yang dirumuskan oleh Terzaghi dengan data dan langkah perhitungan sebagai berikut:

W = Total Gaya (W1+W10+W200)

= (41,902 + 25,418 + 34,787)

= 102,107 ton/m

c = 0 kg/cm^2 = 0 ton/m^2

γ = 1,9 ton/m^3

Df = 1,00 m

B = 19,22 m

ϕ = 33,5°

Dengan nilai ϕ = 33,5° diperoleh nilai Nc', Nq', Nγ' dari Tabel 2.7. sebagai berikut:

Nc' = 23,113

Nq' = 11,275

Nγ' = 8,587

Sehingga dengan tersebut dapat dihitung besarnya daya dukung sebagai berikut:

Qult = c. Nc' + 0,5.γ.B.Nγ' + γ.Df.Nq'

= (0 x 23,113) + (0,5 x 1,9 x 19,22 x 8,587) + (1,9 x 1,00 x 11,275)

= 177,799 ton/m^2

= 177,799 ton/m per satuan panjang

Dengan menggunakan angka faktor kemanan (SF) sebesar 3 maka diperoleh kapasitas dukung tiang ijin:

$$Qijin = \frac{Qult}{SF}$$

$$= \frac{177,799}{3}$$

= 59,27 ton/m

Karena beban struktur lebih besar dari pada daya dukung tanah di lokasi yaitu 102,107 ton/m > 59,27 ton/m sehingga tanah dibawah struktur tidak kuat untuk menahan beban struktur diatasnya atau dapat dikatakan stabilitas struktur terhadap daya dukung tidak aman.

4.7.4 Stabilitas Terhadap Kelongsoran Rotasi

Perhitungan stabilitas terhadap kelongsoran rotasi pada struktur bangunan *retaningwall* menggunakan bantuan program Geostudio Geoslope 2012. Dengan memasukan data material batu sebagai berikut:

Tabel 4.46
Data input untuk analisa stabilitas kelongsoran rotasi pada Geostudio Geoslope

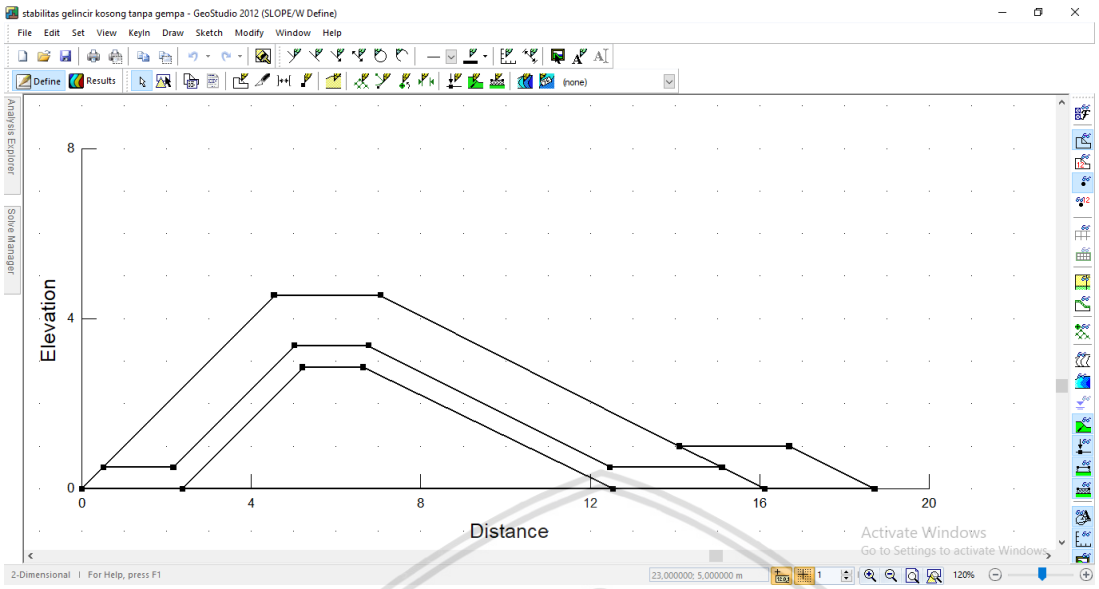
Material	C		γ		φ
	ton/m^2	kPa	ton/m^3	kN/m^3	°
Tanah	0	0	2,20	21,57	33,5

Sumber: PT. Pelabuhan Indonesia III (Persero) Cabang Tanjung Wangi

Kemudian data tersebut dimasukan ke dalam program Geostudio Geoslope 2012. Dengan hasil *trial and error* Geoslope sebanyak 100 slip surface. Perhitungan di lakukan dalam kondisi tanpa gempa serta perhitungan juga dibedakan menjadi 2 kondisi yaitu kondisi pada saat air DWL dan kondisi tanpa air.

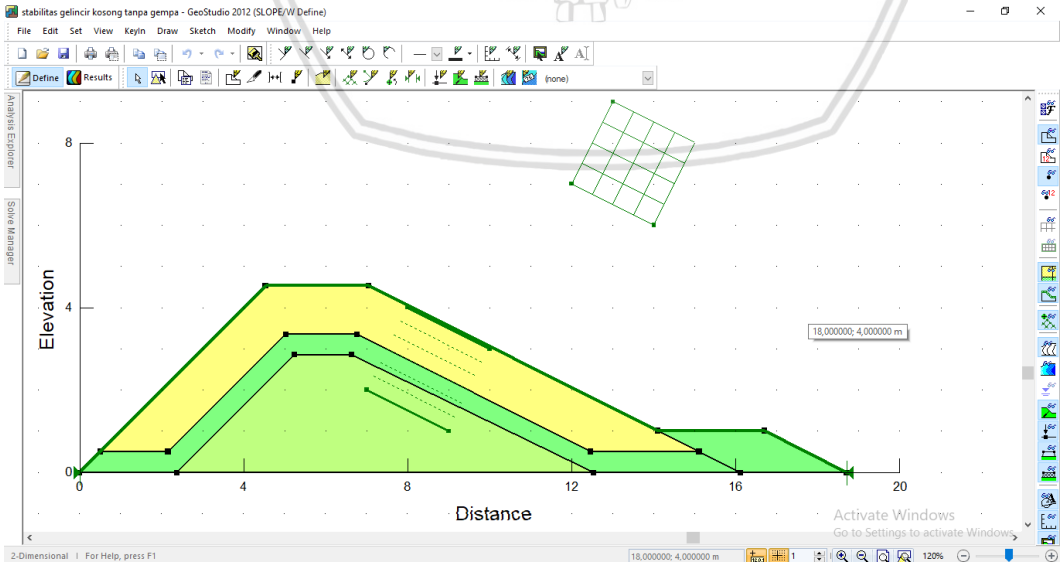
Berikut merupakan langkah-langkah dalam perhitungan sabilitas kelongsoran rotasi dengan mengunakan GeoStudio 2012 (SLOPE/W) :

- Setelah memilih *create a slope/w* pada tampilan awal Geostudio 2012 maka akan muncul dialog *KeyIn Analyses*. Pada kolom *Analisis Type* diisi dengan metode yang akan digunakan dalam analisis, pada studi ini mengunakan metode Bishop, Ordinary dan Jambu. Pada kolom *Slip Surface – direction of movement* atau arah pergerakan longsor dipilih *Right to left*. Serta kolom *Slip suerface – slip surface optoin* yang merupakan metode analisis yang digunakan dipilih *Grid and radius*.
- Atur lembar kerja dengan membuat ukuran kertas pada menu *Set Page* dan batas koordinat sesuai bidang gambar yang akan dianalisa di GeoStudio dengan perintah *Sceth-axes*.
- Gambarkan bidang yang akan dianalisa dengan mengunakan perintah *Draw – point* kemudian hubungakan tiap koordinat dengan *polyline*. Pada studi ini gambar bidang yang akan dianalisa diimport dari file Autocad dengan format dxf mengunakan perintah *File – Import Region*. Dimana gambar bidang yang akan diimport harus terdiri dari poligon tertutup dan disimpan dalam fortmat dxf.



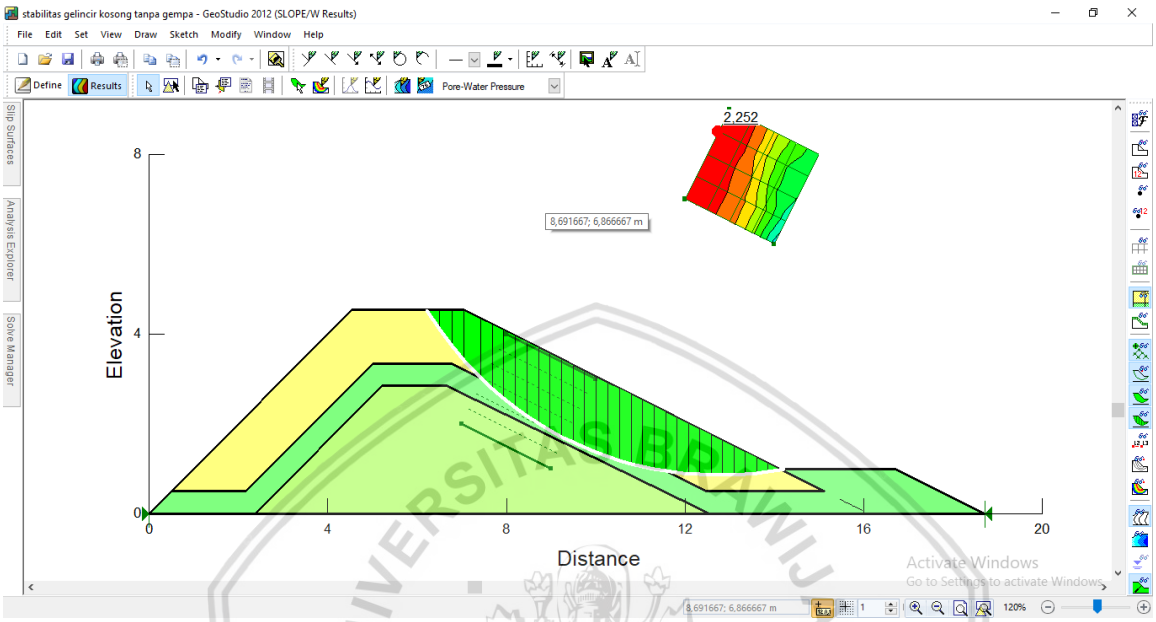
Gambar 4.14 Tampilan *region* hasil import dari file Autocad
Sumber: Hasil Simulasi

- Untuk mendefenisnikan parameter tiap *region* perlu dilakukan input material dengan perintah *KeyIn – Materials*. Kemudian pada dialog *materials*, menu *material model* dipilih *Mohr-Coulomb* serta mengisi karakteristik region seperti *unit weight, cohesion* dan *phi* sesuai data seperti yang tertera pada Tabel 4.51
- Kemudian mengeplotkan material ke region yang ada dengan perintah *Draw – Materials – Assign*. Serta mengeplotkan *Grid* dengan Perintah *Slip surface – grid* dan radius dengan perintah *Slip surface – radius.*

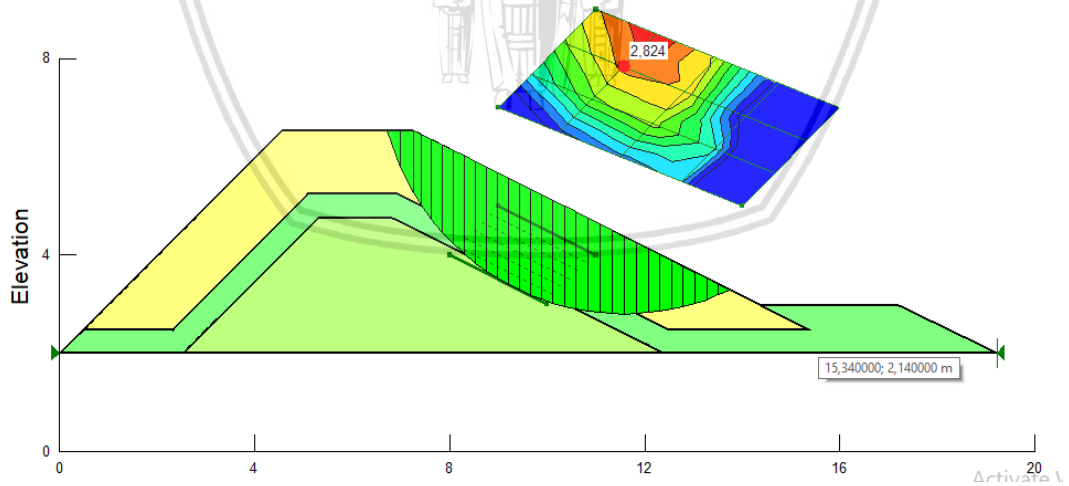


Gambar 4.15 Tampilan gambar setelah mengeplotkan *materials*, *grid* dan *radius*
Sumber: Hasil Simulasi

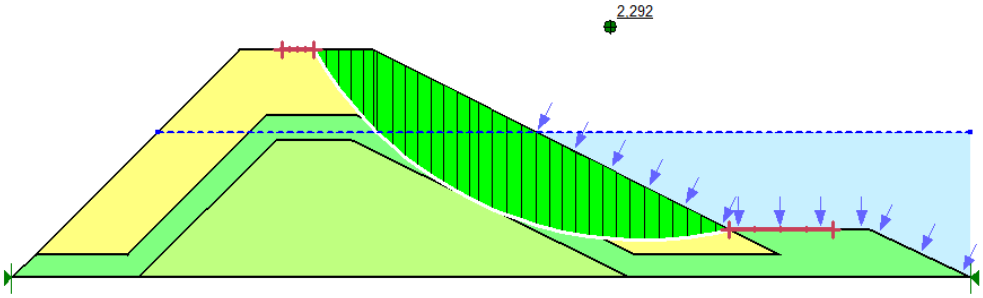
- Mulai analisa untuk mengetahui bidang longsor dan nilai faktor keamanannya dengan perintah *Solve manager – start*.



Gambar 4.16 Tampilan hasil analisa berupa bidang longsor dan nilai faktor keamanannya
Sumber: Hasil Simulasi



Gambar 4.17 Gambar irisan bidang longsor kondisi surut tanpa gempa Fs = 2,824 >1,5
Sumber: Hasil Simulasi



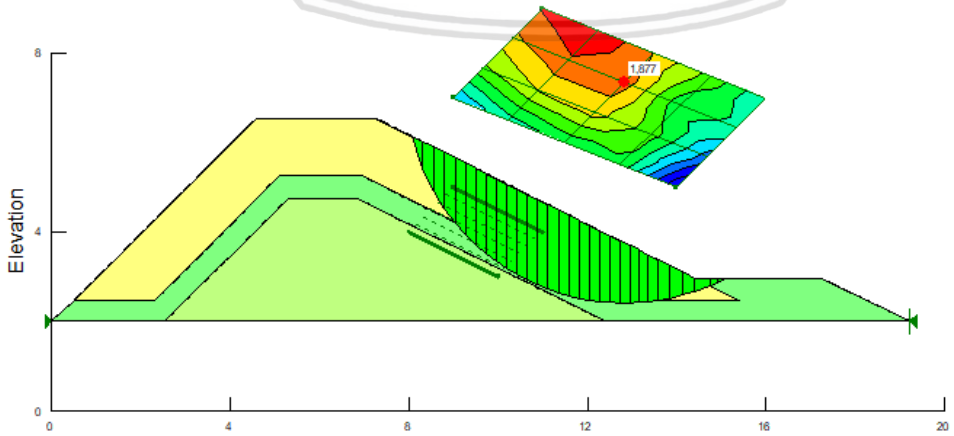
Gambar 4.18 Gambar irisan bidang longsor kondisi DWL tanpa gempa Fs = 2,292 >1,5
Sumber: Hasil Simulasi

Berikutnya dihitung stabilitas kelongsoran rotasi terhadap gempa. Dari peta zona gempa untuk perencanaan teknis tanggul dan tembok laut oleh Pusat Litbang Sumber Daya Air tahun 2004, pantai Boom berada pada zona E dengan Z = 1,20 -1,40. Dengan kala ulang 25 tahun dan prediksi jenis tanah berupa aluvium maka diperoleh nilai a_c sebesar 155 dan nilai v (faktor koreksi) sebesar 1,10 yang dapat dihitung dengan persamaan sebagai berikut:

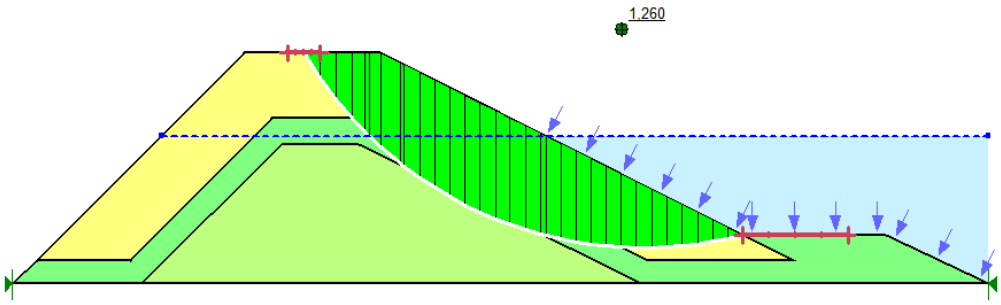
a_d = z . a_c . v
= 1,40 x 155 x 1,10
= 238,7

k_h = a_d / g
= 238,7/981
= 0,24

Kemudian koefisien gempa tersebut dimasukan kedalam *option* seismic load pada *software* Geostudio Geoslope sehingga diperoleh hasil analisa yang akan ditampilkan pada tabel berikut dengan mengunakan *safety factor* (SF) sebesar 1,2:



Gambar 4.19 Gambar irisan bidang longsor kondisi surut dengan gempa Fs = 1,877 >1,2
Sumber: Hasil Simulasi



Gambar 4.20 Gambar irisan bidang longsor kondisi DWL dengan gempa Fs = 1,260 >1,2
Sumber: Hasil Simulasi

4.7.5 Penurunan Pondasi Menerus

Dalam analisa penurun pondasi menerus pada studi ini mengunakan teori elastisitas untuk tanah berbutir (granuler) menggunakan faktor yang mempengaruhi regangan yang diusulkan oleh Schmertmann (1978), dengan perhitungan sebagai berikut:

γ = 1,9 ton/m^3

B = 19,22 m

Df = 1,00 m

T = 10 tahun

q = γ Df

= 1,9 x 1,00 x 9,81

= 18,595 kN/m^2

$\bar{q}$ = $\frac{W}{B}$

= $\frac{102,107}{19,22}$ x 9,81

= 52,116 kN/m^2

C_1 = $1-0,5\left(\frac{q}{q-q}\right)$

= $1-0,5\left(\frac{18,595}{52,116-18,595}\right)$

= 0,723

C_2 = $1+0,2\log\left(\frac{T}{0,1}\right)$

$$= 1 + 0{,}2 \log\left(\frac{10}{0{,}1}\right)$$

$$= 1{,}40$$

Pada kasus ini L dianganggap tidak terbatas, sehingga L/B > 10. Pada grafik L/B > 10 angka Iz yang sangat jelas adalah saat z = 0, z = B, dan z = 4B. dimana z dihitung dari dasar pondasi:

Tabel 4.47
Nilai Iz (faktor regangan) berdasarkan kedalaman

Z (m)	Iz
0	0.2
19,22	0.5
76,88	0

Sumber: Perhitungan

Contoh perhitungan pada kedalaman 0-4 m sebagai berikut:

Δz = 4 m

Es = 766N (untuk data SPT dengan satuan kN/m^2)

= 766 x 15

= 11490 kN/m^2

Iz_0 = 0,200

Iz_3 = 0,262

Rerata Iz $= \frac{Iz_0 + Iz_3}{2}$

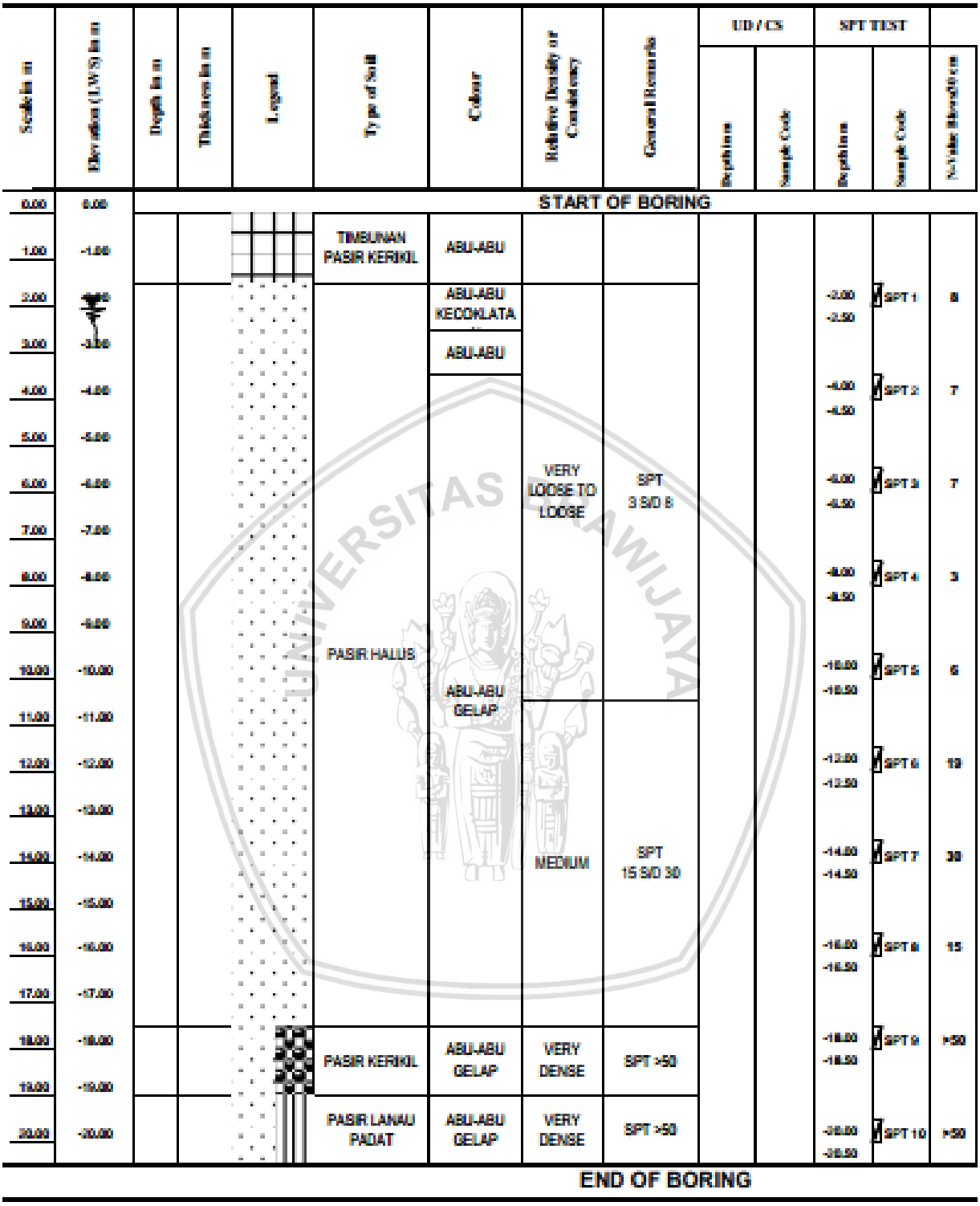
$= \frac{0{,}200 + 0{,}262}{2}$

= 0,231

Iz/Es. Δz $= \frac{Iz}{Es} \times \Delta z$

$= \frac{0{,}231}{11490} \times 4$

= 0,0000805 m^3/kN



Gambar 4.21 Data mekanika tanah drilling log
Sumber: Data Mekanika Tanah PT. Pelindo III

Selanjutnya perhitungan akan disajikan dalam bentuk Tabel 4.48 sebagai berikut:

Tabel 4.48
Perhitungan penurunan elastis pada pondasi menerus

N SPT	Kedalaman m	Δz m	Es (kN/m2)	Average Is	Is/Es.Δz m3/kN
15	0-4	4	11490	0,231	0,0000805
10	4.0-8.0	4	7660	0,294	0,0001533
25	8.0-12.0	4	19150	0,356	0,0000744
45	12.0-16.0	4	34470	0,419	0,0000486
50	16.0-19.0	3	38300	0,473	0,0000371
	Jumlah				0,0003938

Sumber: Perhitungan

Se $= C_1 C_2 (\bar{q} - q) \sum \left(\frac{Iz}{Es} \right) \Delta z$

$= 0{,}723 \times 1{,}4 (52{,}116 - 18{,}595) \times 0{,}000394$

$= 0{,}013 \text{ m} \approx 1{,}3 \text{ cm}$

Besaranya penurunan yang terjadi pada pondasi menerus adalah 1,3 cm. Karena penurunan yang terjadi pada pondasi menerus lebih kecil dari pada penurunan maksimum yang diijinkan untuk pondasi menerus yaitu sebesar 1 inch = 2,54 cm atau 1,3 < 2,54 maka dapat dikatakan aman.

4.7.6 Perhitungan Pondasi Tiang Pancang

Untuk perhitungan pondasi material pancang yang digunakan adalah cerucuk bambu. Pemilihan bambu sebagai pancang didasarkan pada kemampuan fisik bambu dimana selama terendam oleh air atau lumpur bambu tidak akan mengalami lapuk. Cerucuk bambu sendiri memliki profil sebagai berikut:

Panjang = 3 meter

Diameter = 8 cm = 0,008 m

γbambu = 700 kg/m^3 = 0,70 ton/m^3

σ_{ijin} bambu = 80 kg/cm^2 = 800 ton/m^2

Ep = 100000 kg/cm^2

4.7.6.1 Kapasitas Dukung Tiang Tunggal

Dengan menggunakan data SPT dapat dihitung kapasitas daya dukung pada tanah granuler atau non kohesif yang diusulkan oleh Mayerhoff (1976). Perhitungan Tahanan ujung persatuan luas dihitung dari nilai N-SPT sepanjang 8d diatas tiang sampai 3d dibawah tiang. Untuk diameter = 0.2 m pada kedalaman 12 m maka diperoleh:

d = 0,2 m

m = 2

n = 32

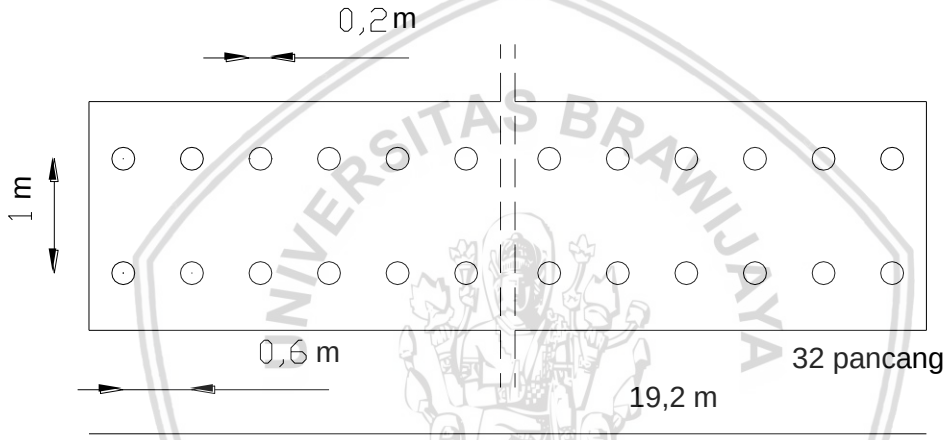
s = 0,6 m

Jarak antar tiang pancang

2,5 d < s < 3,5 d

0,5 < 0,6 < 0,7 (d nya memenuhi)

Dengan d 0,6 dapat memenuhi syarat.



Gambar 4.22 Gambar denah pondasi kelompok tiang
Sumber: Hasil Perhitungan

Ked. = 12 m

Ap = $1/4\pi d^2$

= ¼ x 3,14 x $(0,2)^2$

= 0,031 m^2

As = πd

= 3,14 x 0,2

= 0,628 m

N1 = 8 : Nilai SPT pada kedalaman 3d (3 x 0,2 = 0,6 m) dari ujung tiang ke bawah

N2 = 16,5 : Nilai SPT pada kedalaman 8d (8 x 0,2 = 0,8 m) dari ujung tiang ke atas

Nb = $\frac{N1+N2}{2}$

= $\frac{8+16,5}{2}$ = 12,3

a. Tahanan gesek tiang (*friction*)

Qs = 2. N_{60} . As. L

= 2 x 15,3 x 0,628 x 1

= 21,35 kN

$\sum$Qs = Q_{s-1} + Q_s

= 89,8 + 21,35

= 111,16

b. Tahanan ujung tiang

Q_p = 40 . Nb . Ap . L/d

= 40 x 12,3 x 0,031 x 1/0,2

= 76,98 kN

c. Kapasitas dukung ultimit tiang

Berat sendiri tiang pancang

$W_p = \gamma_{tiang} A_{tiang} L$

= 0,07 x 0,0314 x 12

= 0,26 ton

Qult = ($\sum$Qs + Qp)/9.81 – Wp

= (111,16 + 76,98)/9.81 – 0,26

= 18,91 ton

Dengan menggunakan angka faktor kemanan (F) sebesar 3 maka diperoleh kapasitas dukung tiang ijin:

$$Qijin = \frac{Qult}{F}$$

$$= \frac{18,91}{3}$$

= 6,3 ton

Tabel 4.49
Perhitungan daya dukung *ultimate* dan daya dukung ijin pada pondasi tiang pancang dengan data SPT

Ked.	Jenis Tanah	N-SPT	N60	Po	N60'	N1	N2	Nb	Qs	∑Qs	Qp	Qult	Wp	Qult	Qijin
m				ton/m2					kN	kN	kN	kN	ton	ton	ton
1	Timbunan Pasir	4	4	1	8,0	0,0	12,8	6,4	5,02	5,02	40,19	45,22	0,02	4,59	1,53
2	Kerikil, abu abu	8	8	2	16,0	3,2	14,6	8,9	10,05	15,07	55,83	70,91	0,04	7,18	2,39
3		7,5	7,5	3	13,6	11,2	11,9	11,6	9,42	24,49	72,58	97,08	0,07	9,83	3,28
4		7	7	4	10,8	15,1	9,9	12,5	8,79	33,28	78,38	111,67	0,09	11,29	3,76
5		7	7	5	9,3	12,5	8,7	10,6	8,79	42,08	66,46	108,53	0,11	10,95	3,65
6	Pasir Halus Abu-abu	7	7,0	6	8,2	10,2	6,5	8,3	8,79	50,87	52,27	103,14	0,13	10,38	3,46
7		5	5,0	7	5,3	8,9	3,9	6,4	6,28	57,15	40,12	97,27	0,15	9,76	3,25
8		3	3	8	3,0	7,0	3,8	5,4	3,77	60,92	34,02	94,93	0,18	9,50	3,17
9		4,5	4,5	9	4,3	4,3	5,1	4,7	5,65	66,57	29,72	96,29	0,20	9,62	3,21
10		6	6	10	5,6	3,5	9,2	6,3	7,54	74,10	39,78	113,88	0,22	11,39	3,80
11		12,5	12,5	11	11,5	4,9	13,8	9,3	15,70	89,80	58,49	148,29	0,24	14,87	4,96
12		19	17,0	12	15,3	8,0	16,5	12,3	21,35	111,16	76,98	188,14	0,26	18,91	6,30
13	Pasir Halus Abu-abu	24,5	19,8	13	17,4	13,0	18,6	15,8	24,81	135,96	99,12	235,08	0,29	23,68	7,89
14	Gelap	30	22,5	14	19,4	16,1	17,2	16,7	28,26	164,22	104,65	268,88	0,31	27,10	9,03
15		22,5	18,8	15	15,8	18,2	13,7	15,9	23,55	187,77	100,16	287,93	0,33	29,02	9,67
16		15	15,0	16	12,4	17,9	15,0	16,5	18,84	206,61	103,55	310,16	0,35	31,27	10,42
17		26,67	20,8	17	16,8	14,4	19,4	16,9	26,17	232,78	106,22	339,00	0,37	34,18	11,39
18	Pasir Kerikil Abu-abu	38,33	26,7	18	21,1	14,2	23,6	18,9	33,49	266,27	118,54	384,81	0,40	38,83	12,94
19	Gelap	50	32,5	19	25,2	18,5	10,1	14,3	40,82	307,09	89,95	397,04	0,42	40,06	13,35

Sumber: Hasil Perhitungan

d. Kapasitas dukung berdasarkan kekuatan bahan

σ_{ijin} bambu= 800 ton/m^2

Pijin = A_p x σ_{ijin}

= 0,031 x 800

= 25,12 ton

4.7.6.2 Tekanan Maksimum yang Diterima Tiang

Berdasarkan hasil perhitungan stabilitas bangunan *retainingwall* sebelumnya didapat data sebagai berikut:

∑v = 102,11 ton

∑Mv = 7841,94 ton m

n = 32

Tabel 4.50
Perhitungan Variabel Jarak Pembebanan

n	y	y^2	momen
1	0,3	0,09	30,633
2	0,9	0,81	91,898
3	1,5	2,25	153,163
4	2,1	4,41	214,428
5	2,7	7,29	275,693
6	3,3	10,89	336,958
7	3,9	15,21	398,224

Tabel 4.50
Perhitungan Variabel Jarak Pembebanan

n	y	y^2	momen
8	4,5	20,25	459,489
9	5,1	26,01	520,754
10	5,7	32,49	582,019
11	6,3	39,69	643,284
12	6,9	47,61	704,549
13	7,5	56,25	765,815
14	8,1	65,61	827,080
15	8,7	75,69	888,345
16	9,3	86,49	949,610
		491,04	7841,94

Sumber: Hasil Perhitungan

$$\text{Pmax} = \frac{\sum v}{n} + \frac{M.Ymax}{n\ 2\sum Y^2}$$

$$= \frac{102,11}{32} + \frac{7841,94\ .\ 9,3}{32\ .\ 2\ .\ 491,04}$$

$$= 5,5 \text{ ton}$$

Didapatkan Pmax (5,5 ton) < Ptiang (6,3 ton) dan juga Pmax (5,5 ton) < Pijin bahan (25,12 ton), sehingga dapat dikatakan aman.

4.7.6.3 Kapasitas Dukung Kelompok Tiang

Perhitungan kapasitas dukung ijin kelompok tiang berdasarkan tiang tunggal menggunakan nilai efisiensi tiang menurut *Converse-labarre* dengan data sebagai berikut:

m = 2

n = 32

d = 0,2 m

s = 0,6 m

$$\theta = \arctan\frac{d}{s}$$

$$= \arctan\frac{0,2}{0,6}$$

$$= 18,435$$

Dari data diatas dapat dihitung efisiensi (Eg):

$$E_g = 1 - \theta\frac{(n-1)m + (m-1)n}{90mn}$$

$$= 1 - 18{,}435\,\frac{(32-1)2 + (2-1)32}{90 \times 2 \times 32}$$

$$= 0{,}699$$

Sehingga diperoleh kapasitas kelompok tiang ijin sebagai berikut:

$Q_{dukung} = E_g \; n \; Q_{ijin}$

$= 0{,}699 \times 32 \times 6{,}3$

$= 141{,}055$ ton

Karena nilai $Q_{dukung} > Q_{beban}$ yaitu 141,055 > 102,11 maka pondasi tiang pancang dengan kedalaman 12 meter mampu menahan beban struktur yang ada diatasnya dan dapat dikatakan aman.

4.7.6.4 Penurunan Tiang Tunggal

Dalam perhitungan penurunan pada tiang tunggal digunakan metode elastis dengan data dan langkah perhitungan sebagai berikut:

Qp = 79,98 kN

Qs = 21,35 kN

d = 0,2 m

ξ = 0,67

Ap $= 1/4\pi d^2$

$= ¼ \times 3{,}14 \times (0{,}2)^2 = 0{,}0314 \text{ m}^2$

Ep $= 100000 \times 98{,}1 \approx 9810000 \text{ kN/m}^2$

qp = 76,98/0,0314

$= 2451{,}6 \text{ kN/m}^2$

Cp = 0,02

$$Cs = \left(0{,}93 + 0{,}16\sqrt{\frac{L}{D}}\right)C_p$$

$$= \left(0{,}93 + 0{,}16\sqrt{\frac{12}{0{,}2}}\right)0{,}02$$

$$= 0{,}043$$

$$Se_1 = \frac{(Q_p + \xi Q_s)L}{A_p E_p}$$

$$= \frac{(76{,}98 + 0{,}67 \times 21{,}35)12}{0{,}0314 \times 9810000}$$

= 0,00356 m

= 3,56 mm

$Se_2 = \frac{Q_p C_p}{d.q_p}$

$= \frac{76{,}98 \times 0{,}02}{0{,}2 \times 2451{,}6}$

= 0,00314 m

= 3,14 mm

$Se_3 = \frac{Q_s C_s}{L.q_p}$

$= \frac{21{,}35 \times 0{,}0434}{12 \times 2451{,}6}$

= 0,000031 m

= 0,03 mm

$S = Se_1 + Se_2 + Se_3$

= 3,56 + 3,14 + 0,03

= 6,73 mm

Dari perhitungan diperoleh bahwa penurunan tiang tunggal lebih kecil dari pada penurunan maksimum pada tiang tunggal yang di ijinkan (1 inch = 25,4 mm). Perbandingannya yaitu 6,73 < 25,4 sehingga dapat dikatakan aman terhadap penurunan.

4.7.6.5 Penurunan Kelompok Tiang

Penurunan kelompok tiang dalam pasir dihitung mengunakan metode yang diusulkan Mayerhoff (1976) untuk data SPT dengan langkah pekerjaan sebagai berikut:

B = 19,2 m = 1920 cm (Lebar pondasi)

L = 1,0 m = 100 cm (Panjang pondasi)

N-SPT = 19, pada kedalaman 12 m

Q = 102,107 ton

= 102107,06 kg

$q = \frac{Q}{BL}$

$= \frac{102107,06}{1920 \times 100}$

$= 0,5318 \text{ kg/cm}^2$

I $= (1 - \frac{L}{8Bg})$

$= (1 - \frac{100}{8 \times 1920})$

$= 0,993$

Sg $= \frac{2q\sqrt{Bg.I}}{N - SPT}$

$= \frac{2 \times 0,5318\sqrt{1920 \times 0,993}}{19}$

$= 2,44 \text{ cm} \approx 24,4 \text{ mm}$

Dari perhitungan diperoleh bahwa penurunan pondasi kelompok tiang sebesar 24,4 mm atau lebih kecil dari pada penurunan maksimum pondasi kelompok tiang pada tanah berpasir yang diijinkan sebesar 32 mm (Das,1995). Didapatkan perbandingannya yaitu 24,4 < 32, maka dapat dikatakan aman terhadap penurunan.

4.7.6.6 Perhitungan Defleksi Tiang

Besarnya defleksi tiang yang terjadi dihitung dengan mengunakan Metode Broms. Dalam studi diketahui pada lokasi bahwa tanah berjenis granuler.

Diketahui dari data cerucuk bambu yang digunakan sebagai berikut:

E_p $= 100000 \text{ kg/cm}^2 = 98,1 \text{ kN/m}^2$

D $= 0,2 \text{ m}$

r $= ½ \text{ D}$

$= ½ \ 0,2$

$= 0,1 \text{ m}$

Maka bisa dihitung defleksi tiang sebagai berikut:

I_p $= \frac{\pi r^4}{4} = \frac{\pi 0,1^4}{4}$

$= 0,00008 \text{ m}^4$

E_pI_p $= 98,1 \text{ x } 0,00008$

$= 0,0077 \text{ kNm}^2$

n_h = 11779 (tabel nilai n_h untuk tanah granuler)

L = 12 m

$$\alpha = \left(\frac{n_h}{E_p I_p}\right)^{\frac{1}{5}} = \left(\frac{11779}{0{,}0077}\right)^{\frac{1}{5}}$$

= 17,25

αL = 17,25 x 12

= 207,038 ; karena αL > 4 maka dianggap tiang panjang (tidak kaku)

e = 0

H = beban horisontal

= (Rt/L)

= (10,26/12) / 9,81= 0,087 kN/m

$$y_o = \frac{2{,}4H}{(n_h)^{3/5}(E_p I_p)^{2/5}} + \frac{1{,}6He}{(n_h)^{2/5}(E_p I_p)^{3/5}}$$

$$= \frac{2{,}4 \times 0{,}087}{(11779)^{3/5}(0{,}0077)^{2/5}} + \frac{1{,}6 \times 0{,}087 \times 0}{(11779)^{2/5}(0{,}0077)^{3/5}}$$

= 0,00528 m ≈ 5,28 mm

Defleksi yang tejadi pada bambu sebesar 5,28 mm. Dimana nilai tersebut lebih kecil dari pada batas defleksi maksimun yaitu sebesar 6-18 mm (Christady,2011, p.313). Karena 5,28 < 6,00 maka pondasi tiang pancang dengan mengunakan material bambu aman terhadap defleksi.

4.8 Rancangan Anggaran Biaya

Dalam perhitungan rancangan anggaran biaya diperoleh dari analisis harga satuan pekerjaan di Kabupaten Banyuwangi dengan rincian daftar harga satuan pekerjaan dan analisis sebagai berikut:

Tabel 4.51
Daftar harga upah kerja Kabupaten Banyuwangi

No	Tenaga Kerja	Satuan	Harga (Rp)
1	Pekerja	Hari	99.000,00
2	Tukang Batu, kayu, Besi, Cat, Konstruksi	Hari	122.000,00
3	Kepala Tukang	Hari	140.000,00
4	Mandor	Hari	158.000,00

Sumber: Standart Satuan Harga Kabupaten Banyuwangi

Tabel 4.52
Daftar harga jenis material Kabupaten Banyuwangi

No	Jenis Material	Satuan	Harga
1	Batu Gunung Lokal (200-300) kg	m^3	105.000,00
2	Batu Gunung Lokal (10-30) kg	m^3	105.000,00
3	Batu Gunung Lokal (1-5) kg	m^3	105.000,00
4	Pasir Urug	m^3	150.000,00
5	Geotextile	m^2	120.500,00
6	Bambu Ø 8 cm d 12 m	batang	58.000,00
7	Bambu Ø 20 cm d 12 m	batang	174.000,00
8	Tali Pengikat	m	1.600,00

Sumber: Standart Satuan Harga Kabupaten Banyuwangi

Tabel 4.53
Daftar harga sewa alat Kabupaten Banyuwangi

No	Jenis Alat	Satuan	Harga
1	Excavator	jam	276.000,00
2	Tripot tinggi 5 m	Sewa-hari	220.000,00
3	Alat pancang/Hammer 0,5 ton	Sewa Hari	197.000,00

Sumber: Standart Satuan Harga Kabupaten Banyuwangi

Tabel 4.54
Pekerjaan galian tanah berpasir

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,265	99.000,00	26.235,00
2	Mandor	OH	0,0265	158.000,00	4.187,00
				Jumlah Harga Tenaga Kerja	30.422,00
B	Bahan				
				Jumlah Harga Bahan	
C	Peralatan				
	Excavator (Standtar)	jam	0,15	276.000,00	41.400,00
				Jumlah Harga Peralatan	41.400,00
	Harga Satuan Pekerjaan per	m^3			71.822,00

Sumber: Hasil Perhitungan

Tabel 4.55
Pekerjaan timbunan pasir kembali hasil galian

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,33	99.000,00	32.670,00
2	Mandor	OH	0,033	158.000,00	5.214,00
		Jumlah Harga Tenaga Kerja			37.884,00
B	Bahan				
		Jumlah Harga Bahan			
C	Peralatan				
	Exavator (Standtar)	jam	0,15	276.000,00	41.400,00
		Jumlah Harga Peralatan			41.400,00
	Harga Satuan Pekerjaan per	m^3			79.284,00

Sumber: Hasil Perhitungan

Tabel 4.56
Pekerjaan pasangan armor batu Ø 0,97 m 1000-1100 kg

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	1,35	99.000,00	133.6500,00
2	Tukang batu	OH	0,27	122.000,00	32.940,00
3	Mandor	OH	0,135	158.000,00	21.330,00
				Jumlah Harga Tenaga Kerja	187.920,00
B	Bahan				
1	Batu gunung 200-300 kg	m^3	1,45	105.000,00	152.250,00
				Jumlah Harga Bahan	152.250,00
C	Peralatan				
	Exavator (Standtar)	jam	0,13	276.000,00	35.880,00
				Jumlah Harga Peralatan	35.880,00
	Harga Satuan Pekerjaan per	m^3			376.050,00

Sumber: Hasil Perhitungan

Tabel 4.57
Pekerjaan timbunan batu pelindung Ø 0,45 m 100-200 kg

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	1,2	99.000,00	118.800,00
2	Tukang batu	OH	0,24	122.000,00	29.280,00
3	Mandor	OH	0,12	158.000,00	18.960,00
		Jumlah Harga Tenaga Kerja			167.040,00
B	Bahan				
1	Batu gunung 10-30 kg	m^3	1,32	105.000,00	138.600,00
		Jumlah Harga Bahan			138.600,00
C	Peralatan				
	Exavator (Standtar)	jam	0,12	276.000,00	33.120,00
		Jumlah Harga Peralatan			33.120,00
	Harga Satuan Pekerjaan per	m^3			338.760,00

Sumber: Hasil Perhitungan

Tabel 4.58
Pekerjaan timbunan batu pelindung Ø 0,17 m 5-10 kg

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	1,1	99.000,00	108.900,00
2	Tukang batu	OH	0,22	122.000,00	26.840,00
3	Mandor	OH	0,11	158.000,00	17.380,00
		Jumlah Harga Tenaga Kerja			153.120,00
B	Bahan				
1	Batu gunung 1-5 kg	m^3	1,15	105.000,00	126.000,00
		Jumlah Harga Bahan			126.000,00
C	Peralatan				
	Exavator (Standtar)	jam	0,1	276.000,00	30.360,00
		Jumlah Harga Peralatan			30.360,00
	Harga Satuan Pekerjaan per	m^3			309.480,00

Sumber: Hasil Perhitungan

Tabel 4.59
Pekerjaan matras bambu

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,5	99.000,00	49.500,00
2	Mandor	OH	0,05	158.000,00	7.900,00
	Jumlah Harga Tenaga Kerja				57.400,00
B	Bahan				
1	Bambu Ø 8 cm	batang	4	58.000,00	232.000,00
2	Tali Pengikat	m	5	1.600,00	8.000,00
	Jumlah Harga Bahan				240.000,00
C	Peralatan				
	Jumlah Harga Peralatan				
	Jumlah Harga Tenaga, Bahan, dan Peralatan				297.400,00

Sumber: Hasil Perhitungan

Tabel 4.60
Pekerjaan pemasangan tiang pancang Cerucuk bambu Ø 20 cm

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,12	99.000,00	11.880,00
2	Operator tripod/crane	OH	0,04	122.000,00	4.880,00
3	Mandor	OH	0,12	158.000,00	18.960,00
	Jumlah Harga Tenaga Kerja				35.720,00
B	Bahan				
1	Bambu Ø 20 cm	m	1	258.000,00	174.000,00
	Jumlah Harga Bahan				174.000,00
C	Peralatan				
1	Tripot tinggi 5 m	Sewa-hari	0,04	220.000,00	8.800,00
2	Alat pancang/Hammer 0,5 ton	Sewa Hari	0,04	197.000,00	7.880,00
	Jumlah Harga Peralatan				16.680,00
	Jumlah Harga Tenaga, Bahan, dan Peralatan				226.400,00

Sumber: Hasil Perhitungan

Tabel 4.61
Pekerjaan pemasangan geotekstil dengan ketebalan sedang

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,16	99.000,00	15.840,00
2	Tukang tembok/gali	OH	0,032	122.000,00	3.904,00
3	Mandor	OH	0,016	158.000,00	2.528,00
	Jumlah Harga Tenaga Kerja				22.272,00
B	Bahan				
1	Geotextile	m^2	1,08	120.500,00	130.140,00
	Jumlah Harga Bahan				130.140,00
C	Peralatan				
	Jumlah Harga Peralatan				
	Jumlah Harga Tenaga, Bahan, dan Peralatan				152.412,00

Sumber: Hasil Perhitungan

Tabel 4.62
Pekerjaan pembersihan lahan

No	Uraian	Satuan	Koefisien	Harga Satuan (Rp)	Jumlah Harga (Rp)
A	Tenaga Kerja				
1	Pekerja	OH	0,06	99.000,00	5.940,00
2	Mandor	OH	0,006	158.000,00	948,00
	Jumlah Harga Tenaga Kerja				6.888,00
B	Bahan				
	Jumlah Harga Bahan				
C	Peralatan				
	Jumlah Harga Peralatan				
D	Jumlah Harga Tenaga, Bahan, dan Peralatan				6.888,00

Sumber: Hasil Perhitungan

Tabel 4.63
Rekapitulasi harga dan volume pekerjaan

No	Jenis Pekerjaan	Satuan	Harga	Volume
1	Pembersihan Lokasi	m^2	6.888,00	18710,00
2	Galian tanah berpasir	m^3	71.822,00	10830,00
3	Pasangan armor batu Ø 0,97 m (2 lapis) W=1000-1100 kg	m^3	376.050,00	19046,20
4	Timbunan batu pelindung Ø 0,45 m (2 lapis) W=100-200 kg	m^3	338.760,00	11553,70
5	Timbunan batu pelindung Ø 0,17 m (2 lapis) W=5-10 kg	m^3	309.480,00	15812,40
6	Timbunan pasir kembali hasil galian	m^3	79.284,00	20866,30
7	Pemasangan geotextile	m^2	152.412,00	25680,00
8	Pemasangan tiang pancang cerucuk bambu Ø 0,2 m	m^2	226.400,00	19200,00
9	Pekerjaan matras bambu	m	297.400,00	19200,00

Sumber: Hasil Perhitungan

Tabel 4.64
Rancangan Anggaran Biaya

No	Uraian Pekerjaan	Satuan	Volume	Harga Satuan (Rp)	Jumlah Harga (Rp)
I	**PEKERJAAN PERSIAPAN**				
1	Mobilisasi/Demobilisasi personil dan alat berat	Ls	1	20.000.000,00	20.000.000,00
2	Direksi Ket/Barak kerja	Ls	1	10.000.000,00	10.000.000,00
3	Papan nama proyek	Ls	1	500.000,00	500.000,00
4	Pengukuran, pemasangan profil dan Bouwplank	Ls	1	10.000.000,00	10.000.000,00
					40.500.000,00
II	**PEKERJAAN KONSTRUKSI *RETAININGWALL***				
1	Pembersihan Lokasi	m^2	18710,00	6.888,00	128.874.480,00
2	Galian tanah berpasir	m^3	10830,00	71.822,00	777.832.260,00
3	Pasangan armor batu Ø 0,91 m (2 lapis) W=200-300 kg	m^3	19046,20	376.050,00	7.162.323.510,00
4	Timbunan batu pelindung Ø 0,42 m (2 lapis) W=10-30 kg	m^3	11553,70	338.760,00	3.913.931.412,00
5	Timbunan batu pelindung Ø 0,15 m (2 lapis) W=1-5 kg	m^3	15812,40	309.480,00	4.893.621.552,00
6	Timbunan pasir kembali hasil galian	m^3	20866,30	79.284,00	1.654.363.729,20
7	Pemasangan geotextile	m^3	25680,00	152.412,00	3.913.940.160,00
8	Pemasangan tiang pancang cerucuk bambu Ø 0,2 m	m^2	19200,00	226.400,00	4.346.880.000,00
9	Pekerjaan matras bambu	m	19200,00	297.400,00	5.710.080.000,00
					22.444.887.103,20
	Jumlah				22.485.387.103,20
	PPN 10%				2.248.538.710,32
	Total				24.733.925.813,52
	Dibulatkan				24.734.000.000,00
Terbilang	**Dua Puluh Empat Milyar Tujuh Ratus Tiga Puluh Empat Juta Rupiah**				

Sumber: Hasil Perhitungan

Dari perhitungan rencana anggaran biaya diperoleh total anggaran biaya pembangunan dinding penahan (*retainingwall*) di pantai Boom Kabupaten Banyuwangi sebesar dua puluh empat milyar tujuh ratus tiga puluh empat juta rupiah.

BAB V
PENUTUP

5.1. Kesimpulan

Pantai Boom yang berlokasi di Kabupaten Banyuwangi secara geografis memiliki posisi yang sangat strategis dengan berbagai sumber daya alam yang potensial dan berpotensi besar dibidang pariwisata. Oleh karena itu akan dibangun pelabuhan marina yang berguna untuk tempat berlabuhnya kapal penyeberangan antar pulau (Bali), kapal pariwisata dan kapal kapal milik pribadi. Sehingga diperlukan suatu bangunan pengaman pantai yang mampu menahan gelombang air laut serta melindungi tanah yang ada dibelakangnya.

Akibat proses diatas serta analisis yang telah dilakukan pada bab sebelumnya, maka dapat disimpulkan hal-hal pokok sebagai berikut ini:

1. Dari hasil analisis perhitungan *fetch* didapat hasil bahwa arah angin dominan berasal dari arah Selatan yaitu sepanjang 31,156, sementara dari Timur Laut yaitu sepanjang 8,852 km, sementara dari arah Timur sepanjang 6,654 km dan dari arah Tenggara sepanjang 8,422 km. Dari hasil perhitungan distribusi antara metode Weibull dan Fisher-Tipper I, metode yang paling mendekati gelombang signifikan adalah metode Weibull dengan Kesalahan Absolut Rerata 2,857 %. Tinggi gelombang signifikan dengan kala ulang 25 tahun dari arah Selatan 0,707 m, sementara dari arah Timur Laut sebesar 0,434, dari arah Timur sebesar 0,252 m dan dari arah Tenggara sebesar 0,376 m. Setelah mengalami deformasi (refraksi, difraksi, dan refleksi) maka besarnya gelombang yang datang dari arah Selatan menjadi 0,002 m, sementara dari arah Timur Laut menjadi 0,768 m, dari arah Timur menjadi 1,414 m, dan dari arah Tenggara menjadi 0,147 m.
2. Struktur *retainingwall* direncanakan mengunakan tipe tumpukan batu alam dengan panjang 1.315 m dan berada pada elevasi +2,01 dengan pertimbangan topografi, ekonomis, serta rekayasa pantai agar garis pantai tidak mundur lebih jauh kearah daratan. Dengan dimensi struktur *retainingwall* sebagai berikut:
    - Tinggi Bangunan = 4,53 meter
    - Tingi Jagaan = 0,5 meter
    - Elevasi Dasar = + 2,01 meter
    - Tinggi *Runup* Gelombang = 1,131 meter

- DWL = 2,9 meter
- Lebar = 19,22 meter
- Lebar puncak = 2,69 meter
- Tebal lapisan puncak = 1,79 meter
- Batu penyusun = batu kosong/batu gunung dengan ρ=2,20 t/m^3

3. Stabilitas dan pondasi *retainingwall*:
   - Bangunan terletak pada elevasi +2,01 m maka gaya gelombang yang dianalisis adalah gaya gelombang telah pecah yang bergerak dari arah Timur dengan nilai 10,264 ton.
   - Pada analisis stabilitas geser didapatkan SF sebesar 9,971 dengan keadaan normal SF yang diperbolehkan harus lebih dari 1,5, sementara untuk keadaan gempa SF yang diperbolehkan harus lebih dari 1,3.
   - Pada analisis terhadap daya dukung tanah di lokasi, diperoleh daya dukung ijin tanah sebesar 59,266 ton/m dimana daya dukung tersebut lebih kecil dari pada gaya vertikal pada bangunan yaitu sebesar 102,107 ton/m. Sehingga dapat disimpulkan bahwa daya dukung tanah mampu menahan beban struktur *retainingwall*.
   - Dari pehitungan stabilitas struktur terhadap kelongsoran rotasi (*rotational slide*) pada kondisi tanpa gempa dapat dikatakan aman kerena nilai SF (*safety factor*) lebih besar dari pada nilai SF maksimum yang diperbolehkan pada kondisi tanpa gempa sebesar 1,5. Dengan rincian, kondisi surut SF sebesar 2,824. Sedangkan untuk nilai SF pada kondisi DWL sebesar 2,292. Dari perhitungan nilai SF pada kondisi gempa dapat dikatakan aman kerena nilai SF (*safety factor*) lebih besar dari pada nilai SF maksimum yang diperbolehkan pada kondisi gempa sebesar 1,2. Dengan rincian, kondisi surut SF sebesar 1,877. Sedangkan untuk nilai SF pada kondisi DWL sebesar 1,260.
   - Pada perhitungan pondasi menerus didapatkan penurunan pondasi sebesar 1,3 cm. Karena penurunan yang terjadi pada pondasi menerus lebih kecil dari pada penurunan maksimum yang diijinkan untuk pondasi menerus yaitu sebesar 1 inch = 2,54 cm maka dapat dikatakan aman.
   - Didapatkan tekanan maksimum yang diterima tiang sebesar 3,5 ton, dimana Pmax (5,5 ton) < Ptiang (6,3 ton) dan juga Pmax (5,5 ton) < Pijin bahan (25,12 ton), sehingga dapat dikatakan aman

- Setelah dilakukan analisis diperoleh bahwa daya dukung pondasi tiang pancang dengan jarak antar tiang pada tiang kelompok 0,6 m dengan material bambu berdiameter 0,2 m pada kedalaman 12 m sebesar 141,055 ton/m. Dimana nilai $Q_{dukung} > Q_{beban}$ yaitu 141,055 > 102,11 maka pondasi tiang pancang dengan kedalaman 12 meter mampu menahan beban struktur yang ada diatasnya dan dapat dikatakan aman.
- Dari perhitungan yang dilakukan terhadap penurunan (*settlement*), diperolah besarnya penurunan yang terjadi pada pondasi tiang pancang sebesar 24,4 mm. Dimana penurunan yang terjadi lebih kecil dari batas penurunan maksimum pada tanah berpasir yaitu sebesar 32 mm sehingga pondasi tiang pancang dapat dikatakan aman terhadap penurunan
- Dari perhitungan terhadap defleksi tiang pada bambu sebesar 5,28 mm. Dimana nilai tersebut lebih kecil dari pada batas defleksi maksimun yaitu sebesar 6-18 mm, sehingga pondasi tiang pancang dapat dikatakan aman terhadap defleksi.

4. Total Rancangan Angaran Biaya (RAB) yang diperoleh dari analisis harga satuan pekerjaan Kabupaten Banyuwangi tahun 2018 yaitu sebesar Rp 24.734.000.000,00.

5.2. Saran

Dari hasil studi yang dilakukan terdapat saran-saran yang diberikan kepada pemilik pekerjaan dalam hal ini PT. Pelabuhan Indonesia III (Persero) Cabang Tanjung Wangi dalam pembangunan bangunan *retainingwall,* yaitu antara lain:

1. Perlu diakukan penelitian dan kajian lebih mendalam terhadap pengaruh kondisi lingkungan dan sosial masyarakat, sehingga apabila terjadi permasalahan akibat pembangunan *retainingwall* dapat diselesaikan lebih cepat dan tepat.
2. Apabila hasil uji kekuatan terhadap batu gunung/batu alam di lokasi studi tidak memenuhi, maka material batu alam dapat diganti dengan mengunakan kubus beton, buis beton ataupun tetrapot dengan berat yang sama.

Halaman ini sengaja dikosongkan.

DAFTAR PUSTAKA

Departement of The Army. 1984. *Shore Protection Manual Volume I*. Washington, DC : Departement of The Army, U.S. Army Corps of Engineers.

Departement of The Army. 1984. *Shore Protection Manual Volume II*. Washington, DC : Departement of The Army, U.S. Army Corps of Engineers.

Departement of The Army. 2008. *Coastal Engineering Manual*. Washington DC: Department of The Army, U.S. Army Corps of Engineers.

Das, Braja M. 1995. *Mekanika Tanah*, Jakarta: Erlangga.

Suroso, et al. 2007. *Teknik Pondasi*, Malang: Jurusan Teknik Sipil Fakultas Teknik Universitas Brawijaya.

Triatmodjo, Bambang. 1999. *Teknik Pantai*, Yogyakarta: Beta Offset.

Yuwono, Nur. 1986. *Teknik Pantai*, Yogyakarta : Biro Penerbit Keluarga Mahasiswa Teknik Sipil Fakultas Teknik Universitas Gadjah Mada.

Yuwono, Nur. 1992. *Dasar-Dasar Perencanaan Bangunan Pantai*. Yogyakarta: Biro Penerbit Keluarga Mahasiswa Teknik Sipil Fakultas Teknik Universitas Gadjah Mada.

JDIH. 2018. *Lampiran 17-18 Standar Satuan Harga Belanja Daerah Kabupaten Banyuwangi Tahun Anggaran 2018.* Banyuwangi: JDIH. http://jdih.banyuwangikab.go.id/keputusan_bupati/detail/lampiran-17-18-standar-satuan-harga-belanja-daerah-kabupaten-banyuwangi-tahun-anggaran2018.

Permen PUPR. 2016. *Lampiran Permen PUPR 28 Tahun 2016.* Jakarta: PUPR. http://birohukum.pu.go.id/uploads/DPU/2016/PermenPUPR28-2016.pdf

Bulan : Januari **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	11	11	225	S	5,659	5,659	11,00	5,66	7,12	1,22	8,88	181,17	1,34	6,62	7,26
2	10	10	225	W	5,144	5,144	10,00	5,14	6,47	1,25	8,26	194,71	1,34	6,18	6,67
3	6	6	180	SW	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
4	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
5	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
6	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
7	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
8	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
9	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
10	8	8	180	SE	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
11	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
12	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
13	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
14	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
15	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
17	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
18	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
19	3	3	225	W	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
20	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
21	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
22	8	8	225	S	4,116	4,116	8,00	4,12	5,18	1,32	6,98	230,47	1,33	5,26	5,46
23	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,33	483,69	1,30	2,56	2,25
24	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
25	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,13	389,17	1,31	3,16	2,93
27	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
28	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
29	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	5,62	286,45	1,32	4,26	4,22
30	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58
31	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	4,89	328,77	1,31	3,73	3,58

Sumber: Perhitungan

Bulan : Februari **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	135	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	360	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	360	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	5	5	360	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	135	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	2	2	360	NW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
4	6	6	0	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	6	6	45	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6	8	8	180	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
7	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	14	14	270	NW	7,202	7,202	14,00	7,20	9,06	1,15	11,81	136,29	1,36	8,67	10,11
9	6	6	270	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	10	10	45	N	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
11	9	9	45	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
12	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16				NW											
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	270	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	9	9	225	SE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
24	3	3	225	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	9	9	360	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
27	10	10	360	NW	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
28	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : April **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	6	6	0	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	6	6	45	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6	7	7	360	NW	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
7	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	360	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	180	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	45	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	8	8	45	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
16	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
17	2	2	180	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
18	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31				NW											

Sumber: Perhitungan

Bulan : Juni **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	360	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	2	2	180	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
19	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : September Tahun : 2007

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	2	2	90	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2007**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	5	5	180	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : November Tahun : 2007

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	0	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	5	5	90	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	7	7	180	SE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
19	6	6	180	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	6	6	180	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	7	7	180	SE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
23	7	7	180	E	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
24	6	6	135	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	6	6	135	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2007

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
9	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	225	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	6	6	180	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	9	9	180	S	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
26	10	10	225	S	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
27	6	6	270	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	7	7	180	SE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
30	5	5	360	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77

Sumber: Perhitungan

Bulan : Januari **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	8	8	225	S	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
4	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	10	10	180	SE	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
7	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	6	6	225	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	6	6	180	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
19				NW											
20	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	6	6	90	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	225	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	180	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Februari **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	225	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	5	5	270	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	6	6	180	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	2	2	225	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
22	3	3	45	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	5	5	225	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	9	9	270	SE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
28	2	2	270	SW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
29	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	45	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
7	4	4	315	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	7	7	360	NW	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
9	3	3	180	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	3	3	90	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	5	5	225	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	45	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23				NW											0,00
24	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	9	9	360	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
26	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	6	6	45	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	3	3	45	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	270	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : April **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	90	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
24	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
25	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	135	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	270	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	6	6	180	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Juni **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : September Tahun : 2008

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	180	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16				N											
17	4	4	100	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	170	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	140	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	3	3	190	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	190	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	6	6	180	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2008**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	6	6	90	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : November Tahun : 2008

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	9	9	360	SE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
17	6	6	45	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	4	4	270	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	8	8	225	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2008

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
10	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	225	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	6	6	180	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Januari **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	8	8	180	SE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
3	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	9	9	225	S	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
8	5	5	360	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	6	6	225	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
11	8	8	180	SE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
12	5	5	360	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	270	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	6	6	270	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	360	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	45	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	45	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76

Sumber: Perhitungan

Bulan : Februari **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	45	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	7	7	360	NW	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
6	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	8	8	135	SE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
13	8	8	180	S	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
14	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
16	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	45	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	225	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	90	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	8	8	45	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	270	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	5	5	90	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
19	9	9	360	NW	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
20	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	135	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	8	8	45	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
3	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	45	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	360	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
28	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
11	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	2	2	270	SW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
13	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	2	2	225	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
15	8	8	45	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
16	6	6	360	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	2	2	225	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
25	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Juni **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	6	6	360	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
2	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	360	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	5	5	180	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	2	2	180	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
10	8	8	360	NW	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
11	4	4	360	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16				NW											
17	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	2	2	180	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
5	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	90	0	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : September Tahun : 2009

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	225	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	270	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2009**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
24	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : November Tahun : 2009

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	8	8	360	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
4	2	2	180	SW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
5	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2009

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	13	13	45	SE	6,688	6,688	13,00	6,69	8,42	1,17	11,16	144,14	1,36	8,22	9,47
3	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	7	7	225	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
16	5	5	45	NW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	315	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	2	2	225	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	135	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	135	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	315	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Januari **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	45	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	45	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	225	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	135	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	45	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	6	6	270	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	225	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	360	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	45	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	90	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	2	2	90	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
27	5	5	45	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	360	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Februari **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	360	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	180	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	45	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	2	2	180	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	2	2	225	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	6	6	135	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	90	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	45	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	9	9	270	SE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
27	3	3	180	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	270	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	135	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	6	6	360	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
8	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	5	5	45	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	5	5	45	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
26	6	6	360	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	270	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	6	6	360	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer =

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	8	8	180	SE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
4	3	3	90	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	225	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	5	5	135	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	5	5	135	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	2	2	180	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
12	5	5	180	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	6	6	180	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
14	8	8	180	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
15	3	3	180	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	135	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19			180	NW											
20	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	135	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	6	6	135	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	5	5	135	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	8	8	180	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
28	4	4	135	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	5	5	180	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer =

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	10	10	360	N	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
4	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	5	5	90	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
13	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	8	8	45	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
16	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
17	5	5	360	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	8	8	45	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
19	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	2	2	135	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Juni **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	5	5	180	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	270	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	270	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	2	2	135	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	4	4	270	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	270	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	135	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	45	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	2	2	90	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
16	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	5	5	180	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	270	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	270	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	6	6	135	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
9	3	3	270	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	270	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	360	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	6	6	135	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	5	5	45	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	90	0	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	180	0	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	5	5	135	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	180	0	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	225	0	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	6	6	360	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
14	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	270	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	5	5	135	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : September Tahun : 2010

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	7	7	45	S	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
11	9	9	90	E	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
12	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	45	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	5	5	180	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	45	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	360	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	270	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2010**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	7	7	360	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
3	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	180	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	270	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	8	8	45	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
27	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	9	9	45	NE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
31	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : November Tahun : 2010

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
5	6	6	360	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6															
7	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
9	10	10	360	NE	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
10	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	8	8	45	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
12	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
14	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	7	7	135	SE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
21	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	180	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	45	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2010

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	45	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	90	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	315	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	7	7	360	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
15	9	9	45	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
16	5	5	270	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	2	2	90	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
18	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	4	4	45	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	3	3	225	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	270	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Januari **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	2	2	360	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
2	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7															
8	5	5	90	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13															
14	11	11	270	NE	5,659	5,659	11,00	5,66	7,12	1,22	9,84	163,54	1,35	7,29	8,18
15	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
21	7	7	360	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
22	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
23	5	5	45	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	45	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Februari **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	4	4	315	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	2	2	45	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	3	3	270	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	5	5	225	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	7	7	45	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
15	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	5	5	90	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	45	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	6	6	360	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	9	9	45	NE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
18	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
19	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	2	2	90	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
23	6	6	90	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	270	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	2	2	315	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
28	4	4	45	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	3	3	315	NW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : April **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	360	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	6	6	315	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
11	4	4	45	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	270	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	270	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	270	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	6	6	315	NW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	4	4	270	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	8	8	90	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
25	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	2	2	135	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	360	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	8	8	45	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
6	8	8	45	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
7	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	5	5	270	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	5	5	90	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	45	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	45	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	45	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	90	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	225	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Juni **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
2	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	90	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	180	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
15	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	180	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	6	6	90	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	270	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	7	7	45	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
11	5	5	360	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	8	8	45	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
13	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	180	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	5	5	135	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	45	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	6	6	360	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
14	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	135	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : September Tahun : 2011

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	5	5	270	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	6	6	270	W	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	6	6	225	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	2	2	180	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2011**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	5	5	180	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	5	5	45	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : November Tahun : 2011

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	90	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	90	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	45	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	5	5	90	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	2	2	270	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
23	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	270	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	6	6	45	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2011

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	6	6	225	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
9	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	2	2	135	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
16	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	7	7	180	S	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
29	7	7	180	S	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
30	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77

Sumber: Perhitungan

Bulan : Januari **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	45	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	5	5	315	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	315	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	6	6	225	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	2	2	90	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
12	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	9	9	90	NE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
18	7	7	315	E	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
19	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	5	5	270	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	6	6	270	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Februari **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	2	2	90	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
4	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	360	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	45	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	180	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	2	2	135	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
14	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	8	8	360	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
22	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	225	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	225	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	6	6	225	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	225	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	45	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	6	6	270	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	6	6	270	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	2	2	90	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	8	8	225	S	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
22	5	5	90	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	360	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	5	5	90	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	5	5	180	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	90	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	45	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	45	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	5	5	360	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	5	5	90	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	135	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	90	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	6	6	360	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	2	2	180	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	90	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	135	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	90	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	3	3	90	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	5	5	45	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	5	5	225	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	315	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	45	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	90	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	6	6	45	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	4	4	135	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	9	9	135	S	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
28	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	2	2	135	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
31	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Juni **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	2	2	135	W	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
5	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	90	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	225	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	2	2	225	SW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	6	6	135	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
22	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	135	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	225	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	2	2	90	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	2	2	225	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
11	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	135	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	225	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	2	2	180	SE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
25	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : September Tahun : 2012

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	5	5	135	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	45	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	225	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	225	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	5	5	90	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	5	5	135	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	180	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2012**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	90	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	140	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	100	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	100	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	150	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	100	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	210	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	120	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	140	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	120	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	120	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	120	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	110	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	100	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	190	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	8	8	160	S	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
25	3	3	100	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	80	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	110	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	110	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	100	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : November Tahun : 2012

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	135	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	45	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	2	2	360	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
18	4	4	90	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	225	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	7	7	180	SE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
22	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	180	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	45	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	45	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	6	6	90	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	3	3	135	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2012

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	225	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	5	5	90	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	6	6	180	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
8	3	3	135	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	5	5	15	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	8	8	45	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
12	6	6	135	SE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	6	6	360	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	45	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	5	5	135	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	5	5	270	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	3	3	90	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	45	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	135	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	90	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	8	8	360	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
30	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Mei **Tahun : 2013**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	120	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10				N											
11															
12															
13															
14															
15	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	80	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	330	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	6	6	80	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22				N											
23				N											
24	2	2	120	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
25	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	6	6	310	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	6	6	350	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77

Sumber: Perhitungan

Bulan : Juni **Tahun : 2013**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	7	7	50	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
3	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	80	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10				N											
11	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15															
16	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	350	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21															
22															
23															
24															
25	3	3	80	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28															
29															
30															
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2013**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	170	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	330	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	100	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	280	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	0	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	2	2	160	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
14	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	210	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	170	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	6	6	220	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
19															
20	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	6	6	100	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	2	2	200	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
27	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	210	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	210	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2013**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	120	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	190	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	120	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11															
12	13	13	200	N	6,688	6,688	13,00	6,69	8,42	1,17	11,16	144,14	1,36	8,22	9,47
13	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	260	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16															
17	4	4	150	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	160	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	240	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	5	5	150	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	170	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	120	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24															
25															
26															
27				N											
28	4	4	220	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	5	5	230	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	5	5	170	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : September Tahun : 2013

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	2	2	160	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
2	3	3	130	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	140	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	2	2	270	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
7	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	5	5	190	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	150	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11															
12															
13	5	5	120	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	5	5	160	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	4	4	220	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17															0,00
18	2	2	190	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
19	2	2	140	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	4	4	140	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22															
23	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24															
25	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	140	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	130	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30															
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2013**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	150	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	140	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	110	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	140	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	190	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	130	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11															
12	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	170	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17															
18	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	190	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	160	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	180	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26															
27	3	3	130	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	150	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	150	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : November Tahun : 2013

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2															
3	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	140	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	2	2	200	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
13	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	270	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	21	21	80	N	10,803	10,803	21,00	10,80	13,60	1,04	16,04	100,32	1,39	11,54	14,37
17	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19															
20	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	5	5	210	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	2	2	150	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
23	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	2	2	240	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
25	3	3	220	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	2	2	240	E	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
27	3	3	130	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28															
29															
30	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2013

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1															
2	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	150	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5															
6	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	110	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	150	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11															
12	2	2	300	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
13	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	5	5	250	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	6	6	210	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	5	5	220	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	3	3	300	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Januari **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	6	6	220	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
2	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	240	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	5	5	200	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	8	8	200	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
15	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	7	7	190	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
17	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	340	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	30	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	10	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	320	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Februari Tahun : 2014

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	6	6	10	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
2	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
6	8	8	50	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
7	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	350	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	340	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	2	2	120	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
17	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	2	2	50	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	5	5	140	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21															
22	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	8	8	100	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
24															
25	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	2	2	330	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
28	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2															
3	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	100	E	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	290	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	6	6	320	E	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	5	5	220	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	38	38	40	N	19,549	19,549	38,00	19,55	24,60	0,90	25,11	64,08	1,44	17,41	23,84
16	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	70	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	4	4	120	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	6	6	40	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	9	9	70	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
22	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	8	8	20	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
25	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26	7	7	10	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
27	8	8	30	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
28	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	350	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	360	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	7	7	260	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
14	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	5	5	10	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	12	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	6	6	240	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
26															
27	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	2	2	180	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
30	2	2	120	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	10	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
4	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	2	2	120	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	2	2	210	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
15	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	150	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	6	6	10	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	5	5	230	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31			45	NE											

Sumber: Perhitungan

Bulan : Juni **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	2	2	354	NE	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
5	6	6	170	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6	6	6	200	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	5	5	210	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	6	6	357	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
15	5	5	357	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	6	6	357	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
17	5	5	357	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	170	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	5	5	357	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	357	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	357	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	7	7	357	SW	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
25	4	4	357	NE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	5	5	357	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	357	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	357	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	7	7	357	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
4	6	6	357	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	357	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	6	6	357	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	5	5	357	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	2	2	100	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
12	6	6	130	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	2	2	210	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	150	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	5	5	190	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	150	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20				N											
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															

Sumber: Perhitungan

Bulan : September Tahun : 2014

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23	4	4	190	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	150	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28															
29	2	2	170	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
30															
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2014**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	220	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	120	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	220	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	140	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20															
21															
22	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23															
24	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	140	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	150	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : November Tahun : 2014

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	6	6	100	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20															
21	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	120	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	6	6	100	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2014

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1															
2	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	5	5	100	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	5	5	170	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	300	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	6	6	0	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
22	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	6	6	230	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
27	6	6	140	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	5	5	230	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	8	8	200	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
30	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	5	5	260	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Januari **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	360	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	7	7	230	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
3	5	5	220	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	6	6	110	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	5	5	230	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	270	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	10	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	220	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	6	6	290	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	5	5	210	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Februari **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	360	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	7	7	310	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
14	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	290	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	7	7	20	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
20	5	5	210	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	10	10	100	N	5,144	5,144	10,00	5,14	6,47	1,25	9,15	175,75	1,34	6,81	7,52
22	6	6	30	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	6	6	130	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	320	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	270	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	5	5	300	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	2	2	340	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
2	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	5	5	300	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	30	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
8	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	330	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	15	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	6	6	20	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	6	6	20	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	6	6	20	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	8	8	30	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
26	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
27	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29															
30	6	6	30	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
Sumber: Perhitungan															

1 knot = 0,5144 m/s

Bulan : April **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	8	8	350	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
2	4	4	150	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	10	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	7	7	10	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
8	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	10	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	5	5	10	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	8	8	30	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
14	5	5	100	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	8	8	50	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
16	4	4	10	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	8	8	60	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
18	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	7	7	200	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
23	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	8	8	200	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
25	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	340	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	6	6	180	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	3	3	110	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	5	5	130	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13															
14	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	107	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	30	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	5	5	18	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	150	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Juni **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	250	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	4	4	195	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	4	4	190	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	230	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	5	5	190	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	4	4	220	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	200	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	200	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	90	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	170	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	5	5	200	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	6	6	200	S	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	220	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	140	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	190	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	220	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	4	4	210	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	120	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	4	4	200	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	7	7	10	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
13	7	7	20	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
14	5	5	350	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	5	5	200	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	220	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	5	5	250	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	160	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	220	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	150	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	150	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	210	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	160	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
15	6	6	20	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
17	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	270	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	230	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	6	6	160	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	3	3	250	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	200	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : September Tahun : 2015

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	140	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	220	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	210	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	210	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	180	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	200	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	3	3	230	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	230	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	120	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24															
25	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	220	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	190	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2015**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1															
2	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	2	2	200	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
7	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	140	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	5	5	100	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	6	6	170	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
15	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	3	3	230	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	5	5	220	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	220	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	210	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	100	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	200	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	100	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	5	5	130	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	180	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : November Tahun : 2015

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
6	5	5	140	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	130	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	16	16	260	N	8,231	8,231	16,00	8,23	10,36	1,12	13,06	123,20	1,37	9,53	11,36
16	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	150	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	6	6	150	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2015

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	4	4	140	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	140	SE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	210	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
8	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	6	6	270	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
14	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	110	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	6	6	200	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
19	9	9	230	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
20	5	5	200	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	30	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05

Sumber: Perhitungan

Bulan : Januari **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	260	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	7	7	50	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
13	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	7	7	10	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
19	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	6	6	200	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
Sumber: Perhitungan															

Bulan : Februari **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	3	3	30	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	9	9	50	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
11	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	2	2	100	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
14	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	6	6	110	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
23	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	8	8	40	NE	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
6	4	4	300	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	7	7	60	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
8	4	4	70	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	6	6	100	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
10	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	100	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	260	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	12	12	280	N	6,173	6,173	12,00	6,17	7,77	1,20	10,51	153,13	1,35	7,76	8,83
20	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	6	6	200	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
25	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	5	5	50	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	6	6	80	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
2	6	6	70	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	6	6	70	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	4	4	100	NW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
7	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	6	6	90	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
9	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	6	6	70	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17	8	8	70	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
18	4	4	270	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
20	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	5	5	180	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	3	3	140	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	7	7	100	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
2	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	7	7	100	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
4	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	70	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
12	6	6	70	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	7	7	160	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
15	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	170	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	2	2	140	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76

Sumber: Perhitungan

Bulan : Juni **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
4	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	2	2	80	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
7	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
8	2	2	210	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
18	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	6	6	30	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	6	6	40	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
4	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
5	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	3	3	300	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
16	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	2	2	190	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	2	2	250	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
25	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Agustus **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	220	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	7	7	20	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
6	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	200	SE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	2	2	130	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
18	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	200	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
22	5	5	160	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	6	6	50	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
28	7	7	60	NE	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
29	6	6	20	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	9	9	30	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
31	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : September Tahun : 2016

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	7	7	30	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
6	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	200	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	4	4	20	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
22	2	2	170	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
23	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
30	9	9	30	NE	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
31															

Sumber: Perhitungan

Bulan : Oktober **Tahun : 2016**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	40	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	110	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	8	8	120	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
9	5	5	30	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
10	7	7	50	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
11	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	6	6	40	NE	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
13	8	8	60	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
14	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
15	7	7	130	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
16	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	190	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	280	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	6	6	160	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
22	11	11	70	NE	5,659	5,659	11,00	5,66	7,12	1,22	9,84	163,54	1,35	7,29	8,18
23	8	8	60	N	4,116	4,116	8,00	4,12	5,18	1,32	7,73	208,04	1,33	5,80	6,17
24	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	4	4	130	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : November Tahun : 2016

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	90	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	5	5	330	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	260	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	150	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
15	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	280	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
21	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
22	4	4	130	SE	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Desember Tahun : 2016

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	6	6	100	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	2	2	240	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
4	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	10	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6															
7	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8															
9															
10	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11															
12															
13															
14															
15	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	5	5	110	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
19	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	7	7	150	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
27	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : Januari **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
3	3	3	80	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	80	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	4	4	340	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	2	2	150	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
16	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	2	2	210	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
19	2	2	70	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
20	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	50	NE	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	100	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	7	7	40	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
25	7	7	240	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
26	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	3	3	40	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	40	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
30	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Februari **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	210	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	6	6	230	SW	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
3	6	6	240	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
4	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
5	5	5	230	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
6	5	5	60	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
7	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	3	3	130	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	2	2	280	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
13	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	50	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	7	7	50	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
19	5	5	30	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
20	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	7	7	60	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
22	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	3	3	300	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	5	5	50	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
27	5	5	40	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
28	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29															
30															
31															

Sumber: Perhitungan

Bulan : Maret **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	60	E	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	90	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	3	3	230	E	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	4	4	100	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	5	5	230	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
9	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
11	5	5	20	NE	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
12															
13	4	4	180	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	6	6	260	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
15	5	5	70	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
16	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
17															
18	4	4	60	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19															0,00
20	6	6	40	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
21															
22															
23															
24	5	5	80	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
25	5	5	20	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
26															
27	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28															
29	3	3	70	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30															
31	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : April **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	3	3	150	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	210	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	7	7	50	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
6	4	4	30	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7															
8															
9	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
10	2	2	230	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
11	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14															
15	3	3	110	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	6	6	60	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
18	9	9	350	N	4,630	4,630	9,00	4,63	5,83	1,28	8,45	190,32	1,34	6,31	6,85
19	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	5	5	160	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	5	5	110	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	7	7	70	N	3,601	3,601	7,00	3,60	4,53	1,37	6,99	230,13	1,33	5,26	5,47
25	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	3	3	0	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
27	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	3	3	200	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Mei **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	220	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
3	3	3	60	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	4	4	260	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
7	5	5	140	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	240	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	280	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
12	3	3	230	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	4	4	270	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
14	2	2	200	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
15	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	220	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	270	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	4	4	230	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	210	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	180	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	2	2	270	S	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
22	5	5	230	SW	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
23	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
24	4	4	110	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	240	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	2	2	210	SW	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
27	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	4	4	120	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
29	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
31	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55

Sumber: Perhitungan

Bulan : Juni **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
2	5	5	200	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	3	3	210	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	3	3	250	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
5	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	130	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	3	3	210	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
8	2	2	260	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
9	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	270	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
13	3	3	20	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	3	3	90	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	140	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
17	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
18	3	3	160	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
19	3	3	210	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
21	2	2	180	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
22	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	5	5	120	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
24	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
25	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	3	3	240	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
28	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
29	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	3	3	190	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
31															

Sumber: Perhitungan

Bulan : Juli **Tahun : 2017**

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
2	2	2	140	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
3	3	3	120	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
4	4	4	170	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	3	3	120	S	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
6	3	3	210	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
7	5	5	260	W	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
8	3	3	280	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
9	4	4	210	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
11	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	4	4	200	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
13	5	5	180	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
14	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
15	3	3	200	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
16	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	140	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	200	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	3	3	170	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
20	2	2	200	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
21	3	3	150	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
23	6	6	230	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
24	4	4	200	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	3	3	230	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
26	4	4	180	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	200	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	6	6	120	N	3,087	3,087	6,00	3,09	3,88	1,42	6,22	258,57	1,32	4,70	4,77
29	4	4	170	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
30	4	4	290	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31	4	4	240	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31

Sumber: Perhitungan

Bulan : September Tahun : 2017

ΔT ≈ -2°C Elevasi Anemometer = 2

Tanggal	Kec. Rerata	Kec. Max	Arah		Kec. Rerata	Kec. Max	Uz		U10	RL	Ut	t	Ut/3600	U	Ua
	knot	*knot*	(°)	mata angin	*m/dt*	*m/dt*	*knot*	*m/dt*	*m/dt*		*m/dt*	*dt*	*m/dt*	*m/dt*	*m/dt*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1	5	5	110	S	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
2	5	5	240	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
3	4	4	130	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
4	4	4	170	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
5	4	4	120	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
6	2	2	130	N	1,029	1,029	2,00	1,03	1,29	1,85	2,71	593,17	1,30	2,09	1,76
7	4	4	50	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
8	4	4	230	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
9	4	4	130	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
10	4	4	230	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
11	3	3	220	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
12	5	5	150	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
13	3	3	180	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
14	4	4	250	W	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
15	4	4	140	SW	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
16	4	4	160	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
17	4	4	170	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
18	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
19	4	4	250	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
20	5	5	130	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
21	3	3	240	W	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
22	3	3	250	SW	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
23	3	3	250	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
24	4	4	140	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
25	4	4	150	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
26	4	4	210	S	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
27	4	4	160	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
28	5	5	200	N	2,572	2,572	5,00	2,57	3,24	1,48	5,42	296,77	1,32	4,12	4,05
29	3	3	260	N	1,543	1,543	3,00	1,54	1,94	1,68	3,69	436,61	1,30	2,83	2,55
30	4	4	220	N	2,058	2,058	4,00	2,06	2,59	1,57	4,58	351,29	1,31	3,49	3,31
31															

Sumber: Perhitungan

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	6,62	7,26	31156,166	21600	22222,968	Non Fully Developed Sea	16437,3	Fetch Limited	0,6543	3,798	16437,26	4,566	-	-	-	-	22,532	34,439	*swell*	Non Fully Developed Sea	0,6543	3,798
2	W	6,18	6,67	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	4,26	4,22	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	*swell*	Non Fully Developed Sea	0,4927	3,455
5	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	*swell*	Non Fully Developed Sea	0,4927	3,455
6	S	3,16	2,93	31156,166	21600	74622,342	Fully Developed Sea	-	-	-	-	-	-	0,212	2,425	########	5,922	9,189	43,302	*swell*	Fully Developed Sea	0,2122	2,425
7	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	*swell*	Fully Developed Sea	0,1257	1,867
8	E	3,73	3,58	6654,051	21600	20361,602	Non Fully Developed Sea	7431,95	Fetch Limited	0,1492	1,794	7431,95	2,064	-	-	-	-	5,027	33,694	*swell*	Non Fully Developed Sea	0,1492	1,794
9	SE	4,26	4,22	8421,998	21600	19131,565	Non Fully Developed Sea	8231,94	Fetch Limited	0,1979	2,050	8231,94	2,287	-	-	-	-	6,564	33,173	*swell*	Non Fully Developed Sea	0,1979	2,05
10	SE	5,26	5,46	8421,998	21600	13558,812	Non Fully Developed Sea	7553,01	Fetch Limited	0,2562	2,234	7553,01	2,098	-	-	-	-	7,798	30,437	*swell*	Non Fully Developed Sea	0,2562	2,234
11	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
12	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	*swell*	Fully Developed Sea	0,1257	1,867
13	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	*swell*	Non Fully Developed Sea	0,3806	3,17
14	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	*swell*	Non Fully Developed Sea	0,4927	3,455
15	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
16	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	*swell*	Non Fully Developed Sea	0,1371	1,814
17	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	*swell*	Fully Developed Sea	0,1257	1,867
18	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
19	W	2,56	2,25	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	*swell*	Non Fully Developed Sea	0,1371	1,814
21	S	2,56	2,25	31156,166	21600	105797,340	Fully Developed Sea	-	-	-	-	-	-	0,126	1,867	########	4,558	5,443	43,302	*swell*	Fully Developed Sea	0,1257	1,867
22	S	5,26	5,46	31156,166	21600	32432,036	Non Fully Developed Sea	18066,4	Fetch Limited	0,4927	3,455	18066,43	5,018	-	-	-	-	18,651	37,852	*swell*	Non Fully Developed Sea	0,4927	3,455
23	SW	2,56	2,25	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	*swell*	Non Fully Developed Sea	0,3806	3,17
25	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
26	SE	3,16	2,93	8421,998	21600	31197,248	Non Fully Developed Sea	9302,37	Fetch Limited	0,1371	1,814	9302,37	2,584	-	-	-	-	5,141	37,486	*swell*	Non Fully Developed Sea	0,1371	1,814
27	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
28	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
29	S	4,26	4,22	31156,166	21600	45761,798	Non Fully Developed Sea	19690,4	Fetch Limited	0,3806	3,170	19690,40	5,47	-	-	-	-	15,702	41,254	*swell*	Non Fully Developed Sea	0,3806	3,17
30	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001
31	S	3,73	3,58	31156,166	21600	56988,062	Non Fully Developed Sea	20800,5	Fetch Limited	0,3229	3,001	20800,55	5,778	-	-	-	-	14,070	43,580	*swell*	Non Fully Developed Sea	0,3229	3,001

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,933	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	########	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,397	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
11	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,564	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
12	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,982	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,564	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
19	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,933	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	NW	8,67	10,11	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	6,81	7,52	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	########	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
19	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SE	6,31	6,85	8421,998	21600	10034,996	Non Fully Developed Sea	7005,57	Fetch Limited	0,3211	2,409	7005,57	1,946	-	-	-	-	9,064	28,231	***swell***	Non Fully Developed Sea	0,3211	2,409
24	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	NW	6,81	7,52	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
31	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
5	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
11	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,616	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
27	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
28	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-	-									-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	**swell**	Non Fully Developed Sea	0,1061	1,601
3	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	**swell**	Non Fully Developed Sea	0,1061	1,601
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	**swell**	Non Fully Developed Sea	0,1224	1,761
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
10	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	**swell**	Non Fully Developed Sea	0,1897	2,021
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,933	-	-	-	-	13,346	44,748	**swell**	Non Fully Developed Sea	0,2982	2,923
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	**swell**	Non Fully Developed Sea	0,1897	2,021
13	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	**swell**	Non Fully Developed Sea	0,1897	2,021
14	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	**swell**	Non Fully Developed Sea	0,1061	1,601
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
18	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,616	-	-	-	-	3,130	42,700	**swell**	Non Fully Developed Sea	0,0733	1,416
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	########	5,157	6,968	43,302	**swell**	Fully Developed Sea	0,1609	2,112
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
24	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	**swell**	Non Fully Developed Sea	0,1378	1,747
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	**swell**	Non Fully Developed Sea	0,1551	1,89
29	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	**swell**	Non Fully Developed Sea	0,1378	1,747
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	**swell**	Non Fully Developed Sea	0,1194	1,732
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
22	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
10	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
11	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,982	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
12	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
17	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	########	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
28	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,564	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
31	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
14	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
19	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,165	-	-	-	-	3,786	44,781	*swell*	Non Fully Developed Sea	0,0846	1,557
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
28	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
4	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
6	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,564	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
14	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,982	-	-	-	-	5,455	32,347	*swell*	Non Fully Developed Sea	0,1686	1,869
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
21	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
26	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
30	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
31	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
8	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
12	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
14	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
17	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
18	SE	5,26	5,47	8421,998	21600	13526,933	Non Fully Developed Sea	7548,56	Fetch Limited	0,2566	2,236	7548,56	2,097	-	-	-	-	7,807	30,419	*swell*	Non Fully Developed Sea	0,2566	2,236
19	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,196	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
20	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,196	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
22	SE	5,26	5,47	8421,998	21600	13526,933	Non Fully Developed Sea	7548,56	Fetch Limited	0,2566	2,236	7548,56	2,097	-	-	-	-	7,807	30,419	*swell*	Non Fully Developed Sea	0,2566	2,236
23	E	5,26	5,47	6654,051	21600	11560,590	Non Fully Developed Sea	6451,26	Fetch Limited	0,2281	2,067	6451,26	1,792	-	-	-	-	6,672	29,247	*swell*	Non Fully Developed Sea	0,2281	2,067
24	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,876	-	-	-	-	6,085	30,626	*swell*	Non Fully Developed Sea	0,1987	1,974
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
29	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,876	-	-	-	-	6,085	30,626	*swell*	Non Fully Developed Sea	0,1987	1,974
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
6	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
7	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
8	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
10	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
11	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,12	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
19	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,196	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
22	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	S	6,31	6,85	31156,166	21600	24003,236	Non Fully Developed Sea	16757	Fetch Limited	0,6175	3,725	16757,00	4,655	-	-	-	-	21,680	35,108	*swell*	Non Fully Developed Sea	0,6175	3,725
26	S	6,81	7,52	31156,166	21600	21193,022	Non Fully Developed Sea	16243,4	Fetch Limited	0,678	3,843	16243,40	4,512	-	-	-	-	23,073	34,032	*swell*	Non Fully Developed Sea	0,678	3,843
27	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,252	-	-	-	-	17,031	39,612	*swell*	Non Fully Developed Sea	0,4299	3,302
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SE	5,26	5,47	8421,998	21600	13526,933	Non Fully Developed Sea	7548,56	Fetch Limited	0,2566	2,236	7548,56	2,097	-	-	-	-	7,807	30,419	*swell*	Non Fully Developed Sea	0,2566	2,236
30	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
31	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,27	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
5	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NW	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,48	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
20	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,797	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
21	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
28	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
29	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,313	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,706	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31											-												-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	5,80	6,17	31156,166	21600	27601,354	Non Fully Developed Sea	17352,5	Fetch Limited	0,5561	3,598	17352,48	4,8201	-	-	-	-	20,218	36,356	***swell***	Non Fully Developed Sea	0,5561	3,598
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SE	6,81	7,52	8421,998	21600	8860,134	Non Fully Developed Sea	6790,86	Fetch Limited	0,3525	2,485	6790,86	1,8863	-	-	-	-	9,646	27,366	***swell***	Non Fully Developed Sea	0,3525	2,485
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
9	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
10	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
11	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
16	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
21	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	***swell***	Non Fully Developed Sea	0,1987	1,974
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
27	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SE	6,31	6,85	8421,998	21600	10034,996	Non Fully Developed Sea	7005,57	Fetch Limited	0,3211	2,409	7005,57	1,946	-	-	-	-	9,064	28,231	***swell***	Non Fully Developed Sea	0,3211	2,409
28	SW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
7	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
8	NW	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
16	SE	2,83	2,55	8421,998	21600		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
21	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
4	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
5	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
17	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
19	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
23	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
24	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
29	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
30	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
31	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-		-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
14	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
25	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
29	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
30	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
22	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
6	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
17	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
31	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
9	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
26	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
14	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	6,31	6,85	8421,998	21600	10034,996	Non Fully Developed Sea	7005,57	Fetch Limited	0,3211	2,409	7005,57	1,946	-	-	-	-	9,064	28,231	***swell***	Non Fully Developed Sea	0,3211	2,409
17	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
27	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
6	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
9	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	*swell*	Non Fully Developed Sea	0,0825	1,531
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
14	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
23	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
24	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
25	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
31	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
2	SE	5,80	6,17	8421,998	21600	11539,256	Non Fully Developed Sea	7254,52	Fetch Limited	0,2891	2,326	7254,52	2,0151	-	-	-	-	8,452	29,234	*swell*	Non Fully Developed Sea	0,2891	2,326
3	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	S	6,31	6,85	31156,166	21600	24003,236	Non Fully Developed Sea	16757	Fetch Limited	0,6175	3,725	16757,00	4,6547	-	-	-	-	21,680	35,108	*swell*	Non Fully Developed Sea	0,6175	3,725
8	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
9	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
10	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
11	SE	5,80	6,17	8421,998	21600	11539,256	Non Fully Developed Sea	7254,52	Fetch Limited	0,2891	2,326	7254,52	2,0151	-	-	-	-	8,452	29,234	*swell*	Non Fully Developed Sea	0,2891	2,326
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
13	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
28	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
31	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	*swell*	Non Fully Developed Sea	0,0825	1,531

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
4	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	NW	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
9	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
12	SE	5,80	6,17	8421,998	21600	11539,256	Non Fully Developed Sea	7254,52	Fetch Limited	0,2891	2,326	7254,52	2,0151	-	-	-	-	8,452	29,234	***swell***	Non Fully Developed Sea	0,2891	2,326
13	S	5,80	6,17	31156,166	21600	27601,354	Non Fully Developed Sea	17352,5	Fetch Limited	0,5561	3,598	17352,48	4,8201	-	-	-	-	20,218	36,356	***swell***	Non Fully Developed Sea	0,5561	3,598
14	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
19	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
22	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
23	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
24	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
11	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
18	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	NW	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
6	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
17	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
18	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
19	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
20	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
21	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
28	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
29	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
30	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
11	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
15	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
18	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
25	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
30	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
31	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-		-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
2	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
3	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
9	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	***swell***	Non Fully Developed Sea	0,0846	1,557
10	NW	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
4	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	*swell*	Non Fully Developed Sea	0,0733	1,416
5	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
7	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
8						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
13	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
14	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
19	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
20	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	*swell*	Non Fully Developed Sea	0,0825	1,531
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
19	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
23	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
31	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
3	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	SW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
16	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
17	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
18	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
19	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
20	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
21	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
27	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
28	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	SE	8,22	9,47	8421,998	21600	6510,248	Non Fully Developed Sea	6287,29	Fetch Limited	0,4441	2,684	6287,29	1,7465	-	-	-	-	11,253	25,336	***swell***	Non Fully Developed Sea	0,4441	2,684
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
16	NW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
19	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
20	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	***swell***	Non Fully Developed Sea	0,0846	1,557
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
24	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
26	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
27	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
28	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
29	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
7	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
12	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
13	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
14	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
15	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
17	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
18	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
19	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
25	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
27	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
28	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
16	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
17	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
18	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
19	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	0,077	####	#####	####	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
20	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
21	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
22	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
26	SE	6,31	6,85	8421,998	21600	10034,996	Non Fully Developed Sea	7005,57	Fetch Limited	0,3211	2,409	7005,57	1,946	-	-	-	-	9,064	28,231	***swell***	Non Fully Developed Sea	0,3211	2,409
27	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
5	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
6	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
7	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
8	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
17	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
19	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
22	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
25	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
26	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
27	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
28	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
31	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt* *jam*	*m*	*dt*	*dt* *jam*		*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13] [14]	[15]	[16]	[17] [18]		[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	5,80	6,17	8421,998	21600	11539,256	Non Fully Developed Sea	7254,52	Fetch Limited	0,2891	2,326	7254,52 2,0151	-	-	- -		8,452	29,234	***swell***	Non Fully Developed Sea	0,2891	2,326
4	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
5	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
10	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
11	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89 3,1647	-	-	- -		3,786	44,781	***swell***	Non Fully Developed Sea	0,0846	1,557
12	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
13	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
14	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64 2,0832	-	-	- -		8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
15	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
19						-	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	- -	0,161	####	##### ####		6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
22	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
24	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
27	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
28	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
29	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
31											-											-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
3	N	6,81	7,52	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
5	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
6	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
13	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
17	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
18	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
20	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
21	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
23	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
28	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
30	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
31	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
8	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	0,077	####	#####	####	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
9	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
12	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	0,077	####	#####	####	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
19	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
26	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
4	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
7	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
8	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
9	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
13	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
14	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
15						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
19	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
6	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
7	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
12	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
19	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
22	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
23	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
26	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
29	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
5	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
6	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
10	S	5,26	5,47	31156,166	21600	32355,784	Non Fully Developed Sea	18055,8	Fetch Limited	0,4936	3,457	18055,80	5,0155	-	-	-	-	18,673	37,830	***swell***	Non Fully Developed Sea	0,4936	3,457
11	E	6,31	6,85	6654,051	21600	8576,258	Non Fully Developed Sea	5987,21	Fetch Limited	0,2854	2,227	5987,21	1,6631	-	-	-	-	7,746	27,144	***swell***	Non Fully Developed Sea	0,2854	2,227
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
15	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
19	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
30	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
2	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	*swell*	Non Fully Developed Sea	0,4299	3,302
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
5	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
8	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
11	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
18	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
21	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
22	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	*swell*	Non Fully Developed Sea	0,2964	2,365
27	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
28	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
30	NE	6,31	6,85	8852,425	21600	10374,057	Non Fully Developed Sea	7242,28	Fetch Limited	0,3292	2,449	7242,28	2,0117	-	-	-	-	9,370	28,466	*swell*	Non Fully Developed Sea	0,3292	2,449
31	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
3	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	*swell*	Non Fully Developed Sea	0,2631	2,273
5	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
6							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
8	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	*swell*	Non Fully Developed Sea	0,2631	2,273
9	NE	6,81	7,52	8852,425	21600	9159,499	Non Fully Developed Sea	7020,3	Fetch Limited	0,3614	2,527	7020,30	1,9501	-	-	-	-	9,972	27,594	*swell*	Non Fully Developed Sea	0,3614	2,527
10	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
11	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	*swell*	Non Fully Developed Sea	0,2964	2,365
12	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
13	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	*swell*	Non Fully Developed Sea	0,2631	2,273
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
20	SE	5,26	5,47	8421,998	21600	13526,933	Non Fully Developed Sea	7548,56	Fetch Limited	0,2566	2,236	7548,56	2,0968	-	-	-	-	7,807	30,419	*swell*	Non Fully Developed Sea	0,2566	2,236
21	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
23	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
25	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
27	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
28	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	*swell*	Non Fully Developed Sea	0,1686	1,869
29	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
30	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
5	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
6	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
12	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
14	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
17	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
18	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
27	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
28	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	####	#####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
31	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	***swell***	Non Fully Developed Sea	0,0846	1,557
2	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
3	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
4	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
5	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
7							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
9	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
10	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
11	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
12	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NE	7,29	8,18	8852,425	21600	8186,753	Non Fully Developed Sea	6825,99	Fetch Limited	0,3931	2,599	6825,99	1,8961	-	-	-	-	10,548	26,830	***swell***	Non Fully Developed Sea	0,3931	2,599
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
18	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
21	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
22	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
28	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
2	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
6	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
7	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
10	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
11	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
12	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
15	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
16	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
17	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
18	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
19	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
22	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
23	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
24	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
25	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
26	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
27	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
28	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
3	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
5	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
8	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
12	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
13	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
14	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
15	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	NE	6,31	6,85	8852,425	21600	10374,057	Non Fully Developed Sea	7242,28	Fetch Limited	0,3292	2,449	7242,28	2,0117	-	-	-	-	9,370	28,466	*swell*	Non Fully Developed Sea	0,3292	2,449
18	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
20	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
22	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	*swell*	Non Fully Developed Sea	0,0846	1,557
23	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	*swell*	Non Fully Developed Sea	0,1987	1,974
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
25	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
26	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
27	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	*swell*	Non Fully Developed Sea	0,0846	1,557
28	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
31	NW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
2	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
3	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
4	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
7	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
10	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
11	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
13	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
22	NW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
25	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
26	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
7	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
8	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
9	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
15	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
19	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
29	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-		-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
5	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
7	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
9	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
12	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
14	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	*swell*	Non Fully Developed Sea	0,4299	3,302
15	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
19	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
21	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
24	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
25	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
27	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
8	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
12	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
24	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
28	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
29	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
30	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
4	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	***swell***	Non Fully Developed Sea	0,1987	1,974
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
19	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
28	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
2	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
3	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
5	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
7	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
8	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
12	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
14	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
17	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
30	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
2	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
5	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
8	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
11	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
12	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
15	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
17	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
19	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
21	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
23	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
24	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	W	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
30	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	0,077	1,459	#####	3,562	3,324	43,302	*swell*	Fully Developed Sea	0,0768	1,459
31											-												-

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
7	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
12	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
20	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
21	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
23	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
24	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt jam	m	dt	dt jam		m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13] [14]	[15]	[16]	[17] [18]		[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52 2,319	-	-	- -		6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
3	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
5	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
6	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26 2,1956	-	-	- -		7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
9	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
10	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
12	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
13	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
14	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
15	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53 3,0613	-	-	- -		3,663	44,410	***swell***	Non Fully Developed Sea	0,0825	1,531
16	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34 2,3126	-	-	- -		4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
17	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05 2,1197	-	-	- -		4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
18	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	- -	0,161	2,112	##### 5,157		6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02 2,4803	-	-	- -		5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40 2,7059	-	-	- -		4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
27	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
28	S	5,26	5,47	31156,166	21600	32355,784	Non Fully Developed Sea	18055,8	Fetch Limited	0,4936	3,457	18055,80 5,0155	-	-	- -		18,673	37,830	***swell***	Non Fully Developed Sea	0,4936	3,457
29	S	5,26	5,47	31156,166	21600	32355,784	Non Fully Developed Sea	18055,8	Fetch Limited	0,4936	3,457	18055,80 5,0155	-	-	- -		18,673	37,830	***swell***	Non Fully Developed Sea	0,4936	3,457
30	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
31	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32 2,2698	-	-	- -		7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
2	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
6	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
8	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
9	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
11	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	***swell***	Non Fully Developed Sea	0,0846	1,557
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
13	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
16	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
17	NE	6,31	6,85	8852,425	21600	10374,057	Non Fully Developed Sea	7242,28	Fetch Limited	0,3292	2,449	7242,28	2,0117	-	-	-	-	9,370	28,466	***swell***	Non Fully Developed Sea	0,3292	2,449
18	E	5,26	5,47	6654,051	21600	11560,590	Non Fully Developed Sea	6451,26	Fetch Limited	0,2281	2,067	6451,26	1,792	-	-	-	-	6,672	29,247	***swell***	Non Fully Developed Sea	0,2281	2,067
19	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
23	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
28	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
29	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
30	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
31	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
4	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
5	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
6	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
7	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
8	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
10	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
13	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
21	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
22	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
23	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
24	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
29	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-		-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt jam	m	dt	dt jam		m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13] [14]	[15]	[16]	[17] [18]		[19]	[20]	[21]	[22]	[23]	[24]
1	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34 2,3126	-	-	- -		4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
2	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61 5,2518	-	-	- -		17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	- -	####	2,112	##### 5,157		6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
5	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
6	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
7	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
8	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05 2,1197	-	-	- -		4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34 2,3126	-	-	- -		4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
11	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34 2,3126	-	-	- -		4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
12	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60 2,3974	-	-	- -		6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
13	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
14	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
15	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61 5,2518	-	-	- -		17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	- -	####	2,112	##### 5,157		6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
17	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54 2,7974	-	-	- -		4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
19	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61 5,2518	-	-	- -		17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
20	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53 2,6163	-	-	- -		3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
21	S	5,80	6,17	31156,166	21600	27601,354	Non Fully Developed Sea	17352,5	Fetch Limited	0,5561	3,598	17352,48 4,8201	-	-	- -		20,218	36,356	***swell***	Non Fully Developed Sea	0,5561	3,598
22	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
23	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71 2,5641	-	-	- -		5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
24	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26 2,1956	-	-	- -		7,120	31,852	***swell***	Non Fully Developed Sea	0,2235	2,135
25	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27 5,547	-	-	- -		15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
26	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
27	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
28	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -		-	-	-	-	-	-
29	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52 2,319	-	-	- -		6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79 5,9327	-	-	- -		13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05 2,1197	-	-	- -		4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
2	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
3	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
4	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
5	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
6	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
7	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
10	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
13	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
16	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
17	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	***swell***	Non Fully Developed Sea	0,1987	1,974
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
19	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
28	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
29	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
30	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
3	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	***swell***	Non Fully Developed Sea	0,159	1,922
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
7	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
16	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
17	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
18	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
19	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	6,31	6,85	31156,166	21600	24003,236	Non Fully Developed Sea	16757	Fetch Limited	0,6175	3,725	16757,00	4,6547	-	-	-	-	21,680	35,108	***swell***	Non Fully Developed Sea	0,6175	3,725
28	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
29	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-		-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
4	W	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
6	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
7	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
12	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
17	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
20	SW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
22	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
25	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
3	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
5	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
6	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
7	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
11	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
16	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
22	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
23	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
30	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
31	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
5	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
10	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
14	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
17	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
18	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
21	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
24	SE	2,09	1,76	8421,998	21600	61454,297	Non Fully Developed Sea	11020,5	Fetch Limited	0,0825	1,531	11020,53	3,0613	-	-	-	-	3,663	44,410	*swell*	Non Fully Developed Sea	0,0825	1,531
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
27	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
28	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
29	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
30	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
31	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
3	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
4	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
5	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
10	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
17	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
21	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
22	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
23	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
24	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
25	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
26	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	*swell*	Non Fully Developed Sea	0,1686	1,869
27	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
30	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
6	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
8	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
15	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
17	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
18	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
21	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
22	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	S	5,80	6,17	31156,166	21600	27601,354	Non Fully Developed Sea	17352,5	Fetch Limited	0,5561	3,598	17352,48	4,8201	-	-	-	-	20,218	36,356	***swell***	Non Fully Developed Sea	0,5561	3,598
25	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
31	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
5	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
6	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
10	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
12	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
13	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
15	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
16	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
17	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	1,459	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
18	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
19	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
20	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
21	SE	5,26	5,47	8421,998	21600	13526,933	Non Fully Developed Sea	7548,56	Fetch Limited	0,2566	2,236	7548,56	2,0968	-	-	-	-	7,807	30,419	***swell***	Non Fully Developed Sea	0,2566	2,236
22	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
24	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
25	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
27	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
28	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	***swell***	Non Fully Developed Sea	0,1987	1,974
29	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
2	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
5	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
6	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	*swell*	Non Fully Developed Sea	0,1686	1,869
7	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	*swell*	Non Fully Developed Sea	0,4299	3,302
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	*swell*	Non Fully Developed Sea	0,1194	1,732
9	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
11	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	*swell*	Non Fully Developed Sea	0,2964	2,365
12	SE	4,70	4,77	8421,998	21600	16262,475	Non Fully Developed Sea	7904,26	Fetch Limited	0,2235	2,135	7904,26	2,1956	-	-	-	-	7,120	31,852	*swell*	Non Fully Developed Sea	0,2235	2,135
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
15	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
18	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
19	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
21	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	*swell*	Non Fully Developed Sea	0,1061	1,601
23	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	*swell*	Non Fully Developed Sea	0,1224	1,761
24	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
25	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	*swell*	Non Fully Developed Sea	0,1551	1,89
26	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
27	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	***swell***	Non Fully Developed Sea	0,1378	1,747
4	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
26	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	8,22	9,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
21	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
24							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
8	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
9	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
11						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
14	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
15	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
17						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
26	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
2	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
9	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
11						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
14	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
23	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
26						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
12	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	11,54	14,37	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	E	2,09	1,76	6654,051	21600	52520,989	Non Fully Developed Sea	9418,53	Fetch Limited	0,0733	1,416	9418,53	2,6163	-	-	-	-	3,130	42,700	***swell***	Non Fully Developed Sea	0,0733	1,416
27	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
28							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
8	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
9	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	####	####	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	*swell*	Non Fully Developed Sea	0,4299	3,302
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS			Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t				Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt* *jam*	*m*	*dt*	*dt* *jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13] [14]	[15]	[16]	[17] [18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
5	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
6	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
9	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
16	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
19	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
20	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52 2,319	-	-	- -	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
21							-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
23	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
24							-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
27	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	- -	-	-	-	-	-	-
29											-										-
30											-										-
31											-										-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	E	3,49	3,31	6654,051	21600	22632,788	Non Fully Developed Sea	7631,05	Fetch Limited	0,1378	1,747	7631,05	2,1197	-	-	-	-	4,768	34,596	*swell*	Non Fully Developed Sea	0,1378	1,747
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	E	4,70	4,77	6654,051	21600	13898,479	Non Fully Developed Sea	6755,25	Fetch Limited	0,1987	1,974	6755,25	1,8765	-	-	-	-	6,085	30,626	*swell*	Non Fully Developed Sea	0,1987	1,974
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	17,41	23,84	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
20	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
21	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS			Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t				Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-	-									-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NE	2,09	1,76	8852,425	21600	63530,702	Non Fully Developed Sea	11392,9	Fetch Limited	0,0846	1,557	11392,89	3,1647	-	-	-	-	3,786	44,781	*swell*	Non Fully Developed Sea	0,0846	1,557
5	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
14	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
19	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
24	SW	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	NE	3,49	3,31	8852,425	21600	27377,186	Non Fully Developed Sea	9230,71	Fetch Limited	0,159	1,922	9230,71	2,5641	-	-	-	-	5,768	36,282	*swell*	Non Fully Developed Sea	0,159	1,922
26	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
2	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	*swell*	Non Fully Developed Sea	0,2631	2,273
4	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	*swell*	Non Fully Developed Sea	0,2292	2,171
10	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	*swell*	Non Fully Developed Sea	0,1945	2,055
11	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15											-	-			-						-	-	-
16											-	-			-						-	-	-
17											-	-			-						-	-	-
18											-	-			-						-	-	-
19											-	-			-						-	-	-
20											-	-			-						-	-	-
21											-	-			-						-	-	-
22											-	-			-						-	-	-
23											-	-			-						-	-	-
24											-	-			-						-	-	-
25											-	-			-						-	-	-
26											-	-			-						-	-	-
27											-	-			-						-	-	-
28											-	-			-						-	-	-
29											-	-			-						-	-	-
30											-	-			-						-	-	-
31											-	-			-						-	-	-

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
		m/dt	m/dt	m	dt	t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t		m			Tipe	H_{m0} (m)	T_s (detik)
								dt		m	dt	dt	jam	m	dt	dt	jam						
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
15	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
10	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	#####	5,157	6,968	43,302	*swell*	Fully Developed Sea	0,1609	2,112
11	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	*swell*	Non Fully Developed Sea	0,3649	3,126
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	*swell*	Non Fully Developed Sea	0,1897	2,021
27	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	*swell*	Non Fully Developed Sea	0,2982	2,923
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	6,81	7,52	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit			FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t	Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13] [14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
2	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
7	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
13	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
15	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
17	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64 2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
22	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
24	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
30	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	- -	-	-	-	-	-	-	-	-	-	-
31											-											-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
13							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
8	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
14	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
5	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
31											-												-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
7	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	S	4,70	4,77	31156,166	21600	38899,070	Non Fully Developed Sea	18906,6	Fetch Limited	0,4299	3,302	18906,61	5,2518	-	-	-	-	17,031	39,612	***swell***	Non Fully Developed Sea	0,4299	3,302
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
17	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
31	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	9,53	11,36	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
3	SE	2,83	2,55	8421,998	21600	37516,941	Non Fully Developed Sea	9741,4	Fetch Limited	0,1194	1,732	9741,40	2,7059	-	-	-	-	4,688	39,256	***swell***	Non Fully Developed Sea	0,1194	1,732
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	NE	5,80	6,17	8852,425	21600	11929,142	Non Fully Developed Sea	7499,64	Fetch Limited	0,2964	2,365	7499,64	2,0832	-	-	-	-	8,738	29,478	***swell***	Non Fully Developed Sea	0,2964	2,365
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	7,76	8,83	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30											-												-
31											-												-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	NW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SE	4,12	4,05	8421,998	21600	20238,620	Non Fully Developed Sea	8348,52	Fetch Limited	0,1897	2,021	8348,52	2,319	-	-	-	-	6,382	33,643	***swell***	Non Fully Developed Sea	0,1897	2,021
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	####	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	NE	5,26	5,47	8852,425	21600	13983,979	Non Fully Developed Sea	7803,61	Fetch Limited	0,2631	2,273	7803,61	2,1677	-	-	-	-	8,071	30,673	***swell***	Non Fully Developed Sea	0,2631	2,273
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	NE	6,31	6,85	8852,425	21600	10374,057	Non Fully Developed Sea	7242,28	Fetch Limited	0,3292	2,449	7242,28	2,0117	-	-	-	-	9,370	28,466	***swell***	Non Fully Developed Sea	0,3292	2,449
31											-												-

BULAN OKTOBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
6	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
10	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	NE	4,70	4,77	8852,425	21600	16811,948	Non Fully Developed Sea	8171,32	Fetch Limited	0,2292	2,171	8171,32	2,2698	-	-	-	-	7,361	32,118	***swell***	Non Fully Developed Sea	0,2292	2,171
13	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	NE	7,29	8,18	8852,425	21600	8186,753	Non Fully Developed Sea	6825,99	Fetch Limited	0,3931	2,599	6825,99	1,8961	-	-	-	-	10,548	26,830	***swell***	Non Fully Developed Sea	0,3931	2,599
23	N	5,80	6,17	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN NOVEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
14	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SE	3,49	3,31	8421,998	21600	26482,405	Non Fully Developed Sea	8929,02	Fetch Limited	0,1551	1,890	8929,02	2,4803	-	-	-	-	5,579	35,982	***swell***	Non Fully Developed Sea	0,1551	1,89
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN DESEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN JANUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	NE	2,83	2,55	8852,425	21600	38784,556	Non Fully Developed Sea	10070,5	Fetch Limited	0,1224	1,761	10070,54	2,7974	-	-	-	-	4,846	39,583	***swell***	Non Fully Developed Sea	0,1224	1,761
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN FEBRUARI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SW	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29											-												-
30											-												-
31											-												-

BULAN MARET

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	E	4,12	4,05	6654,051	21600	17296,632	Non Fully Developed Sea	7134,94	Fetch Limited	0,1686	1,869	7134,94	1,9819	-	-	-	-	5,455	32,347	***swell***	Non Fully Developed Sea	0,1686	1,869
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	E	2,83	2,55	6654,051	21600	32063,289	Non Fully Developed Sea	8325,34	Fetch Limited	0,1061	1,601	8325,34	2,3126	-	-	-	-	4,006	37,744	***swell***	Non Fully Developed Sea	0,1061	1,601
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	NE	4,12	4,05	8852,425	21600	20922,439	Non Fully Developed Sea	8630,6	Fetch Limited	0,1945	2,055	8630,60	2,3974	-	-	-	-	6,598	33,923	***swell***	Non Fully Developed Sea	0,1945	2,055
12						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN APRIL

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	6,31	6,85	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	5,26	5,47	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN MEI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	*m/dt*	*m*	*dt*			*dt*		*m*	*dt*	*dt*	*jam*	*m*	*dt*	*dt*	*jam*	*m*				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	S	2,09	1,76	31156,166	21600	146995,770	Fully Developed Sea	-	-	-	-	-	-	0,077	1,459	####	3,562	3,324	43,302	***swell***	Fully Developed Sea	0,0768	1,459
22	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SW	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-

BULAN JUNI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
10	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
20	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-

BULAN JULI

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0} (m)	T_s (detik)
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m					
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	S	2,83	2,55	31156,166	21600	89738,748	Fully Developed Sea	-	-	-	-	-	-	0,161	2,112	####	5,157	6,968	43,302	***swell***	Fully Developed Sea	0,1609	2,112
6	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
14	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
28	N	4,70	4,77	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
30	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN AGUSTUS

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	W	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	SW	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BULAN SEPTEMBER

TGL	Arah Angin	U	U_A	Feff	t	Cek Fully / Non Fully Developed		Cek duration / Fetch Limited		Fetch Limit				FDS				Lo	Lo/hs	Jenis Gelombang	Rekapitulasi Perhitungan		
						t_d	tipe	t_c	tipe	Hs	Tp	t		Hs	Tp	t					Tipe	H_{m0}	T_s
		m/dt	m/dt	m	dt			dt		m	dt	dt	jam	m	dt	dt	jam	m				(m)	(detik)
[1]	[2]	[3]	[4]	[6]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
1	S	4,12	4,05	31156,166	21600	48409,822	Non Fully Developed Sea	19969,3	Fetch Limited	0,3649	3,126	19969,27	5,547	-	-	-	-	15,266	41,839	***swell***	Non Fully Developed Sea	0,3649	3,126
2	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
4	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	N	2,09	1,76	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	W	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	SW	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
17	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	W	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SW	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	S	3,49	3,31	31156,166	21600	63344,658	Non Fully Developed Sea	21357,8	Fetch Limited	0,2982	2,923	21357,79	5,9327	-	-	-	-	13,346	44,748	***swell***	Non Fully Developed Sea	0,2982	2,923
27	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	N	4,12	4,05	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	N	2,83	2,55	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	N	3,49	3,31	0,000	21600	0,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31											-												-